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RFP-1325.01 (REV. 9/97)
Previously RF-46522

CORRES. CONTROL
OUTGOING LTR NO.

DOE ORDER # [illegible]

97 RF 06512

DIST.	LTR	ENC
BACON, R.F.	Y	Y
BENSUSSEN, S.J.	X	Y
BORMOLINI, A.M.	X	X
BRAILSFORD, M.D	Y	Y
BRYNER, C.J.		
BURDGE, L.	Y	X
CARD, R.G.	X	X
COSGROVE, M.M.	X	Y
COULTER, W.L.		
CRAWFORD, A.C.	X	X
FERRERA, D.W.		
FERRERA, K.P.		
HARDING, W.A.	Y	Y
HERRING, C.L.	Y	X
HILL, J.A.	Y	Y
MARTINEZ, L.A.	Y	Y
PARKER, A	Y	X
TILLER, R.F.	X	X
VOORHEIS, G.M.	X	X
[illegible]	X	X
[illegible]		
[illegible]	X	X
[illegible]	X	X
[illegible]	Y	X
[illegible]	X	X
COR. CONTROL	X	X
ADMN. RECORD		
TRAFFIC		
PATS/T130G	Y	Y

CLASSIFICATION:		
UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE
[signature] (UNU)
12-17-97
Date

IN REPLY TO RFP CC NO:
61554-RF-97

ACTION ITEM STATUS
☐ PARTIAL/OPEN
☑ CLOSED

LTR APPROVALS:

ORIG & TYPIST INITIALS
HJK/L

KAISER•HILL
COMPANY

December 15, 1997

RF-97-06512

Jessie Roberson
Manager
DOE, RFFO

ANNUAL SUBMISSION OF THE KAISER-HILL TEAM 10 CFR 830.120 QUALITY ASSURANCE IMPLEMENTATION PLAN - RGC-232-97

Ref: Keith Klein, ltr (04788) to Robert Card, Same Subject, October 20, 1997

Enclosed you will find a copy of the Kaiser-Hill Team 10 CFR 830.120 Quality Assurance Implementation Plan, Revision 5. Revision 5 reflects changes made to the Kaiser-Hill Implementation Plan to accommodate DOE, RFFO comments documented in the reference letter. These changes include:

1. A total of 21 of 26 implementation issues in Attachment 1 have been reported complete and updated the path forward forward to the five remaining implementation issues.
2. Added a description of programmatic changes which have taken place during Fiscal Year 1997. These include the Integrated Safety Management System, Site Corrective Action Requirements Manual, Site Documents Requirements Manual, Rocky Flats Environmental Technology Site Functions, and Responsibilities Manual and the Site Strategic Planning Program.
3. Added a discussion on hazards analysis and application of controls to prevent or mitigate the consequences of hazards.
4. Deleted reference to Standards/Requirements Identification Document (S/RIDs) and added a description of the Order Compliance process to determine Site standards.
5. Identified that the Site governing documents for controlling the application of the graded approach are the Site Documents Requirements Manual and the Integrated Safety Management System Manual.
6. Deleted Appendix 2, Graded Approach to the Requirements of 10 CFR 830.120, Reference is made to the Kaiser-Hill Team Quality Assurance Program (QAP) document for this information.

Kaiser-Hill Company, L.L.C.
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Rocky Flats
Environmental Technology Site

Revision 5

KAISER-HILL TEAM

QUALITY ASSURANCE
10 CFR 830.120
IMPLEMENTATION PLAN

APPROVED BY: R.E. Tiller for / R. G. Card / 12/17/97

President and Chief Executive Officer, Kaiser-Hill Company, L.L.C. — Date

Responsible Organization: Quality Program
Effective Date: 12/15/97

ORC review not required
Periodic review frequency: 1 year from the effective date

Reviewed for Classification/UCNI
By [illegible] (UINU)
Date 12-17-97

The signatures on this page document that, for those areas under the representative's cognizance, the representative of each organization concurs that this write-up is accurate, factual, and reflects the current organization's position.

CONCURRENCE—Kaiser-Hill Company, L.L.C.

/s/ R. E. Tiller, 12/17/97
R. E. Tiller, Executive Vice President and
Chief Operating Officer

/s/ S. J. Bensussen, 12/8/97
S. J. Bensussen, Vice President and
General Counsel

/s/ A. M. Bormolini, 12/9/97
A. M. Bormolini, Vice President
Human Resources and Communications

/s/ D. W. Ferrera, 12/10/97 for
M. D. Brailsford, Vice President
Safeguards, Security, Site Operations and
Integration

/s/ L. F. Burdge, 12/10/97
L. F. Burdge, Vice President
Planning and Integration

/s/ W. A. Harding, 12/11/97
W. A. Harding, Vice President
Safety Systems and Engineering

/s/ J. A. Hill, 12/5/97
J. A. Hill, Vice President
Environmental Management and
Compliance

/s/ L. A. Martinez, 12/8/97
L. A. Martinez, Vice President and CFO
Finance and Administration

/s/ A. M. Parker, 12/8/97
A. M. Parker, Vice President
Closure Projects Integration

/s/ G. M. Voorheis, 12/9/97
G. M. Voorheis, Vice President
Nuclear Operations

CONCURRENCE — Principal Subcontractors

/s/ R. F. Bacon, 12/3/97
R. F. Bacon, President
Safe Sites of Colorado

/s/ M. M. Cosgrove, 12/8/97
M. M. Cosgrove, General Manager
Wackenhut Services, L. L. C.

/s/ A. C. Crawford, 12/8/97
A. C. Crawford, President and General Manager
Rocky Mountain Remediation Services, L.L.C.

/s/ C. L. Herring, 12/8/97
C. L. Herring, President and General Manager
DynCorp of Colorado, Inc.

LIST OF EFFECTIVE PAGES

Pages	Effective Date	Change Number
1-40	8/2/96	Rev. 3
1-51	9/1/97	Rev. 4
1-53	12/15/97	Rev. 5

TOTAL NUMBER OF PAGES: 53

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1.0 Introduction

This document was developed by Kaiser-Hill Company, L.L.C. (Kaiser-Hill) with input from the four Principal Subcontractors. Kaiser-Hill and the four Principal Subcontractors comprise the Kaiser-Hill Team. The four Principal Subcontractors are DynCorp of Colorado, Inc. (DCI), Rocky Mountain Remediation Services, L.L.C. (RMRS), Safe Sites of Colorado (SSOC), and Wackenhut Services, L.L.C. (WSLLC). This document is the *Kaiser-Hill Team Implementation Plan for 10 CFR 830.120, Quality Assurance Requirements*, and is referred to as the Implementation Plan throughout the document. This Implementation Plan has been prepared in accordance with 10 CFR 830.120 and the *Department of Energy (DOE) Standard DOE-STD-1082-94, Preparation, Review, and Approval of Implementation Plans for Nuclear Safety Requirements*. This Implementation Plan does not address DOE Order 5700.6C implementation.

This Revision 5 incorporates changes to reflect modifications in the Kaiser-Hill Team Quality Assurance Program during the past year, and changes made to implementation activities included in Attachment 1.

Significant changes incorporated into this revision include the following:

- A total of 21 of 26 implementation issues in Attachment 1 have been reported complete.
- Added to Section 2.0, Implementation Plan Summary, a description of programmatic changes which have taken place during Fiscal Year 1997. These include the Integrated Safety Management System, Site Corrective Action Requirements Manual, Site Documents Requirements Manual, Rocky Flats Environmental Technology Site Functions, and Responsibilities Manual and the Site Strategic Planning Program.
- Added to Section 4.0, Applicability of Nuclear Safety Requirements, discussion on hazards analysis and application of controls to prevent or mitigate the consequences of hazards.
- Deleted from Section 5.0, Safety and Implementation Guides and Technical Standards, reference to Standards/Requirements Identification Document (S/RIDs) and added Order Compliance process to determine Site standards
- Added to Section 5.0, Safety and Implementation Guides and Technical Standards, greater detail related to the Quality Assurance Program Criteria Document.
- Identified in Section 8.0, Graded Approach, that the Site governing documents for controlling the application of the graded approach are the

Site Documents Requirements Manual and the Integrated Safety Management System Manual.

- Deleted Appendix 2, Graded Approach to the Requirements of 10 CFR 830.120. Reference is made to the Kaiser-Hill Team Quality Assurance Program (QAP) document for this information.

1.1 Background

On July 1, 1995, Kaiser-Hill became the Integrating Management Contractor (IMC) under a performance-based contract specified by the DOE. In executing the IMC role, Kaiser-Hill has responsibility for scoping and assigning work, identifying standards for performance of work, integrating the work of the Principal Subcontractor companies, and providing performance oversight.

The Site is an aging DOE facility in the post production, cleanup, and closure phase of its life cycle. There is no intent to resume production operations. The Kaiser-Hill Team has been tasked to stabilize and consolidate special nuclear material, process waste, perform decontamination, deactivation and demolition, environmental remediation and close the Site.

The Site has a wide range of hazards and safety uncertainties representing a substantial challenge for meeting Price-Anderson Amendments Act (PAAA) requirements. This includes the classical set of problems expected at an aging facility, such as facility authorization basis to meet the new Site mission, deteriorating facility and system material condition, past inadequate configuration control, proceduralization problems, etc. In addition to these problems, operations were shut down in 1989. No special lay-up, deactivation, or storage precautions or actions were taken because it was believed that operations would resume in the near future. This has created a unique set of problems.

Since 1990, efforts have been made to define and correct these problems. However, many of the problems still existed when Kaiser-Hill took over the Site. Upon assuming responsibility for the Site on July 1, 1995, Kaiser-Hill inherited the implementing infrastructure programs and procedures that were developed over the previous five years. The dilemma which faces the Site in a climate of declining funding is to ensure that the existing infrastructure programs and procedures are adequate to support accelerated, cost effective, risk reduction, special nuclear material stabilization, and Site closure, while properly addressing PAAA requirements.

1.2 Nuclear Safety Authorization Bases

The Site is currently performing work under an existing authorization basis (AB) described in documents such as the facility Safety Analyses Reports, Basis for Operation (BFOs), Basis for Interim Operation (BIOs) documents, the Operational Safety Requirements (OSRs), Technical Safety Requirements (TSRs), DOE Safety Evaluation Reports (SERs), AB document Review Reports, and facility-specific commitments made in order to comply with DOE directives, including infrastructure programs such as conduct of operations, radiological control, and criticality safety. Kaiser-Hill believes that, collectively, these documents establish sufficient bases for safe execution of near term baseline and risk reduction activities. In their current state of definition, however, these documents must be updated, upgraded or superseded to form authorization bases for the accelerated Site clean-up and decommissioning mission.

Since assuming control of the Site, Kaiser-Hill has worked in concert with DOE, RFFO, the Defense Nuclear Facilities Safety Board, and other stake-holders to institutionalize a more effective approach to development and implementation of a Site level authorization agreement and facility specific authorization bases to support execution of nuclear related activities at the Site. Substantial progress has been made towards this end, AB documents have been completed or updated for ten of fourteen nuclear facilities which require a new AB.

2.0 Implementation Plan Summary

This 10 CFR 830.120 Implementation Plan provides information regarding implementation of the Quality Assurance (QA) requirements and the Kaiser-Hill Team Quality Assurance Program (hereafter referred to as the QAP) for nuclear facilities and nuclear activities. The QAP is contained in the Quality Assurance Manual. The QAP describes the roles, responsibilities, and commitments for implementing the requirements of 10 CFR 830.120 for nuclear facilities and nuclear activities. Lower-tier subcontractors to Kaiser-Hill and the Principal Subcontractors are included and are accountable to Kaiser-Hill, or the Principal Subcontractor for whom they work, to implement the QA requirements.

Baseline assessments have been conducted against existing Site infrastructure documents to assure that the requirements contained in 10 CFR 830.120 were incorporated. The results of this effort were documented in Compliance Summary Reports. Programmatic deficiencies were documented in

Attachment 1 of this Implementation Plan, including corrective actions and associated cost and schedule for noncompliance areas.

Independent and management assessments are performed against each of the 10 CFR 830.120 criterion to assess implementation in accordance with the programs and procedures. QA Program weaknesses are identified and targeted for corrective action using the Site corrective action process, which allows for proper reporting, characterizing, tracking, statusing, verifying and trending of each deficiency. Significant programmatic deficiencies are reported to DOE via the Noncompliance Tracking System (NTS).

The Baseline assessment identified that many of these Site infrastructure documents reflected the previous contractor organization responsibilities and methods of doing business. Revisions to procedures addressing the integrating management approach will be completed in 1998. Previously identified and reported weaknesses, deficiencies, and noncompliances have been reviewed and evaluated in accordance with the criteria contained in Appendix 1. Items that did not meet the criteria contained in Appendix 1, Criteria for Including Issues in the Quality Assurance 10 CFR 830.120 Implementation Plan, were deleted from subsequent revisions of this Implementation Plan. Those items will continue to be tracked and will be addressed under different DOE Orders and Rules by Compliance Schedule Approvals, corrective action plans, implementation plans, or other resolution documentation. The remaining implementation issues together with budget work authorization documents, additional funding requirements, corrective action tasks, schedules, and significance levels for items identified by the assessments are provided in Attachment 1, Implementation Issue Matrix for Quality Assurance 10 CFR 830.120 Implementation Plan.

Methodology for the annual update of the QAP includes the identification of significant changes to Site infrastructure which affects the implementation of 10 CFR 830.120. Each subcontractor and Kaiser-Hill are informed that changes have taken place and that they are to determine the impact on open items identified in the QAIP and to existing QA Program definition to assure continued compliance.

No implementation issues were identified in the area of Criterion (7) Procurement.

No exemption requests are being submitted at this time. Adequate funding to resolve the Attachment 1 commitments for fiscal year (FY) 1998 has been identified during the budget process.

Significant programmatic changes have taken place to enhance the Kaiser-Hill Team's capability to meet 10 CFR 830.120 requirements. The changes include establishment of the Integrated Safety Management System (ISMS), *Site Corrective Action Requirements Manual, and Rocky Flats Environmental Technology Site Functions and Responsibilities Manual* (scheduled to be issued during late calendar year 1997 or early 1998), and modification of the strategic planning process. A description of these infrastructure changes follows:

- **Integrated Safety Management System:**

The Site is instituting an Integrated Safety Management System (ISMS) through which ongoing and future activities that have the potential to cause harm, including radiological harm, to the workers, public and environment are identified and evaluated. The ISMS integrates safety and environmental management standards/requirements into the work planning and execution processes, and when implemented effectively protects the workers, the public and the environment. The ISMS combines a diverse group of people and risk-graded infrastructure programs to satisfy the multiple safety, environmental, and health needs uniformly. The ISMS identifies the mechanisms for increasing worker involvement in work planning, including hazard and environmental impact identification, analysis, and control; work execution; and feedback/improvement processes. The ISMS is primarily based on the philosophies, principles, and requirements of the *Department of Energy (DOE) Safety Management System Policy (DOE 450.4), Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 95-2, Department of Energy Acquisition Regulation (DEAR) clause 970.5204-2,* and current infrastructure programs in use at the Site. The development of worker protection programs using these standards and applying the graded approach to standards implementation is intended to provide an appropriate level of protection and control for the conduct of work.

The hazards which are credible and have consequences that could cause harm, including radiological harm, to the worker, the public or the environment are identified, analyzed, and categorized, and controls for these hazards and their consequences developed. Site documents which are used to adequately define the controls include: the *Nuclear Safety Manual* and the *Criticality Safety Manual,* which establish a formal set of controls and requirements for a range of activities, usually a facility; The ISMS manual also references procedures which result in detailed, documented hazards assessments and controls for the activity, and determine the appropriate planning process that defines the controls necessary to perform the activity safely.

The ISMS relationship to the application of quality assurance for nuclear facilities and other activities at RFETS is embodied in five basic functions: 1) Define the scope of work; 2) Identify and analyze the hazards; 3) Identify and implement controls; 4) Perform the work; and 5) Provide feedback. ISMS enhances the previous incorporation of quality assurance requirements into these functions due to its' integration of the existing Site infrastructure. The Site infrastructure includes the documents identified in the preceding paragraph as well as others such as, the *Conduct of Engineering Manual* (COEM), Conduct of Operations (COOP) Manual, the *Integrated Work Control Program* (IWCP), the *TRU Waste Management Manual*, 3-MAN-008-WM-001, and the *Low Level Waste Management Plan*, 94-RWP/EWQA-0014 for radioactive waste.

The *ISMS Manual* was effective September 30, 1997, with full implementation scheduled for September 30, 1998. An *ISMS Implementation Plan* has been developed to assure personnel are trained in the concepts of ISMS and understand how the ISMS applies to the processes they now use to accomplish work safely. This will provide for a consistent and logical approach for ISMS implementation. Subcontractor's Quality Assurance Program Plans (QAPPs) will be revised by April 30, 1998, to address the Site established ISMS.

Until the ISMS is fully implemented, the same manuals and procedures that are integrated through the ISMS are used for the identification and control of activities which have the potential to cause radiological harm. When fully implemented, the ISMS will provide greater assurance and consistency in the identification, analysis and categorization of hazards associated with nuclear activities.

- **Site Corrective Action Requirements:**

The pre-existing Corrective Action Program at the Site included various identification and reporting processes, each developed and implemented in order to satisfy specific laws, requirements, or regulations. Although these processes contained many corrective action program elements, they individually did not satisfy all the requirements of umbrella requirements and laws, such as the Rule and Order. As a result, the Site deficiency identification and reporting processes are now required to follow the *Site Corrective Action Requirements Manual* and its implementing procedures in order to assure that deficiencies are uniformly prioritized, tracked, and trended, and that the minimum corrective action elements are met. The Plant Action Tracking System (PATS) is the approved Site tracking system.

- **Site Documents Requirements:**

The *Site Documents Requirements Manual* (SDRM) provides the methodology and requirements for controlling and developing RFETS documents, such as policies, management directives, manuals, procedures, instructions, and job aids.

The SDRM identifies the type, purpose, applicability, and signature requirements for the different Site-applicable document types.

When a procedure is selected as the correct document type, then a graded approach is applied to specify the rigor and level of activity by which the applicable set of standards and requirements are met. A re-engineering effort is currently reviewing the SDRM process for further refinement.

- **Rocky Flats Environmental Technology Site Functions and Responsibilities:**

The Kaiser-Hill Team organizational structure, functional responsibilities (including integration and implementation responsibilities), lines of authority, and interfaces are identified in the *Rocky Flats Environmental Technology Site Functions and Responsibilities Manual.*

This manual ensures that Kaiser-Hill has clearly defined the responsibilities for each contractor at RFETS and is designed so that each contractor:

- Understands the major Site functions.
- Understands the differences between Kaiser-Hill integration responsibilities and subcontractor work performance responsibilities.
- Recognizes the Kaiser-Hill organization with integration responsibilities and overall accountability for each function.
- Recognizes the subcontractor, or in some cases, the Kaiser-Hill organization, with implementation responsibilities for each function.
- Recognizes the organizational units with whom they interface.
- Understands the responsibilities for facility maintenance and operations.

- **Strategic Planning:**

The Kaiser-Hill Team had prepared an *Accelerated Site Action Project* (ASAP) strategic plan (also titled *Choices for Rocky Flats*) to radically decrease the Site risks and increase land availability as compared to the Site's past course of action. This strategic plan provided a number of alternatives for moving forward.

Now, the Kaiser-Hill Team in cooperation with DOE, RFFO has developed a Ten Year Plan (TYP) that will complete cleanup of the Site by 2010. The plan is built on the recent work done in developing the ASAP Phase I, ASAP Phase II, Workout III, and the FY 1997 budget. The TYP brings all of the above activities under a single umbrella.

During FY 1998, Kaiser-Hill is **combining** the *Life Cycle Baseline Plan* and the TYP into the *Focus on 2006 Plan*. The Life Cycle Baseline is a Rocky Flats Closure Project plan that currently shows the Site closing in 2010. Efforts will be made to effect a closure earlier. The impact of the *Focus on 2006 Plan* on the QAP based on planning, scheduling and resource considerations will stem from two activities: 1. Since the *Focus on 2006 Plan* includes an analysis of the Life Cycle Baseline to identify potential cost savings by challenging accepted work practices, regulatory requirements and resource requirements, quality assurance related organizations will need to assure that reductions in these areas remain commensurate with the reduced risk on the Site, and 2. Quality related organizations will need to maintain cognizance of Life Cycle Baseline changes to assure adequate resource considerations due to changes in annual funding, yearly work progress, and Stakeholder influences.

The above reviews are accomplished by the integration of quality requirements during development of Work Authorization Documents (WADs), which address work activities over the entire project period.

When completed and implemented, the Life Cycle Baseline will be a key project management tool for the Rocky Flats Closure Project. It will document the Site's approved plan for project execution through a Work Breakdown Structure (WBS), with WADs providing detailed scope statements and corresponding detailed schedules and cost estimates. The Baseline will encompass the entire scope of the project and extend until the Site Vision is achieved. The Life Cycle Baseline will undergo updates each year (e.g., to reflect actual versus planned progress and changes in DOE funding guidance for outyears). In addition, more detail will be added for current FY and FY plus one. Change control procedures are established and implemented for the Life Cycle Baseline.

The Focus on 2006 Plan, is a DOE Headquarters (HQ) document to facilitate planning and managing Environmental Management (EM) programs. DOE's integrated analysis of all EM Sites' plans will facilitate an integrated approach to waste treatment, material disposition, and other complex issues whose optimal solution may not be achievable on an individual site basis. At intervals specified by HQ, the Focus on 2006 Plan will be updated.

The Integrated Site Baseline is the official approved baseline for the current fiscal year. The fiscal year planning process will include updating the Life Cycle Baseline to reflect the latest funding guidance and actual work progress. This becomes the Integrated Site Baseline and will be used to manage work during the execution year.

The Kaiser-Hill Team follows the defined DOE budgeting process for funding current fiscal year work and for planning work for future fiscal years.

No significant impacts to other programs or activities (not included in this Implementation Plan) have been identified. No special constraints to implementing this plan have been identified.

3.0 General Information

Kaiser-Hill, as the IMC, has overall responsibility for the Site and implements the Site mission through four Principal Subcontractors and two Architect and Engineering/Construction and Construction Management (AE/CCM) Subcontractors. Each of the Principal Subcontractors has specific areas of responsibility. DCI provides sitewide services in support of nuclear facilities such as metrology, occupational medicine, transportation, limited maintenance, and receipt inspection. RMRS performs Site environmental remediation and waste management and is responsible for several specific nuclear facilities. SSOC performs operations and maintenance for the majority of the Site's nuclear facilities. WSLLC provides security services for the Site. Kaiser-Hill and the Principal Subcontractors form the Kaiser-Hill Team. The two AE/CCM subcontractors, Denver West Remediation and Construction, L.L.C. (DWRC), and Rocky Flats Engineers and Constructors (RFEC) provide a broad range of AE/CCM services as specifically described and authorized by task orders under contract to Kaiser-Hill.

This Implementation Plan for 10 CFR 830.120 includes input from the individual Principal Subcontractors and from the evaluation of previously reported weaknesses, deficiencies, and noncompliances.

The *DOE Standard DOE-STD-1082-94, Preparation, Review and Approval of Implementation Plans for Nuclear Safety Requirements*, was used for the development of the format and content of this document.

This Implementation Plan (Rev. 5) is a revision to the Implementation Plan (Rev. 4) submitted by Kaiser-Hill on July 30, 1997.

This Implementation Plan applies to Site nuclear facilities and to activities with the potential to cause radiological harm.

This Implementation Plan is based on QA baseline assessments conducted by the Kaiser-Hill Team during contract transition against existing Site infrastructure programs and procedures. Valuable input was provided by Site workers. Programmatic implementation assessments continued in fiscal year (FY)1997. Program weaknesses were identified and targeted for corrective action using the Site corrective action process, which allows for proper reporting, tracking and trending; significant programmatic deficiencies were reported to DOE via the Noncompliance Tracking System (NTS). Attachment 1 lists the QA Criteria of 10 CFR 830.120, the infrastructure programs that support each criterion, the implementation issues, along with additional supporting information such as corrective action tasks, schedules,

and funding. Compensatory measures are recorded. The Plant Action Tracking System (PATS) significance levels are also included.

The remainder of the Implementation Plan addresses each of the sections outlined in DOE-STD-1082-94.

4.0 Applicability of Nuclear Safety Requirements

Title 10 CFR 830.120 applies to nuclear facilities and to activities with the potential to cause radiological harm, however the applicability of 10 CFR 830.120 is not limited to hazard category 2 and 3 facilities. 10 CFR 830.120 is applicable to activities that have the potential for causing radiological harm regardless of where they occur. The specific facility Authorization Basis (AB) document identifies the category of the nuclear facility in accordance with DOE Order 5480.23. Each subcontractor is responsible for the development and maintenance of the facility AB documents for Hazard Category 2 and 3 nuclear facilities. The Site Safety Analysis Report (SAR) is planned to contain a comprehensive listing of the hazard category of each Site nuclear facility as identified in the AB documents. Kaiser-Hill Safety Systems & Engineering is responsible for the Site SAR.

Quality assurance requirements for activities which have the potential to cause radiological harm are implemented as a part of the Site infrastructure. The Site safety management infrastructure is integrated through the ISMS process which assures that the scope of work is defined, hazards are identified and analyzed, controls are identified and implemented to prevent or mitigate the consequences of the hazards, work is performed, and feedback of results of these processes are provided to management to assure continuous improvement for safety. Site infrastructure documents include controls to address 10 CFR 830.120 requirements and include the *Nuclear Safety Manual, Criticality Safety Manual, Activity Control Envelope Development procedure, 1-D55-ADM-02.37*, and the *Activity Definition Process procedure, 1-R32-ADM-02.38,* in addition to the QAP, SDRM, Integrated Work Control Program (IWCP) Manual, Conduct of Operations (COOP) Manual, and the Conduct of Engineering (COEM) Manual.

Hazards are identified, analyzed and categorized, and controls for these hazards and their consequences are developed based on the hazard. This is accomplished through the ISMS process. This can include the process of developing a SAR, Basis for Interim Operation (BIO) or BFO for nuclear activities, or Health and Safety Plans (HASPs), Job Hazards Analyses (JHA), As-Low-As Reasonably-Achievable (ALARA) reviews, Radiological Work Permits (RWPs), Remedial Investigations/Design Plans, Activity Control Envelopes (ACEs), Feasibility Studies, or Proposed Action Memoranda (PAM) for non-nuclear/radiological and industrial hazard activities. Whether or not a SAR, BIO, or BFO must be developed for a given activity, set of activities, or facility can be determined by performing a hazards analysis per DOE standards *DOE-EM-STD-5502-94, DOE-STD-1027-92* and DOE-STD-

3009-94, and DOE memorandum from Richard L. Black, dated June 6, 1997, addressing hazard categorization.

Workers are informed of hazards through work planning activities. Hazards analysis identifies the severity of consequences of the hazards. Work planning applies the necessary controls to mitigate or prevent the consequences of the hazards. Pre-evolution briefings are conducted with workers, which review the work planning, applicable procedures, safety analyses and other pertinent safety precautions. Pre-evolution briefings are required for tasks in nuclear facilities and complex or uncertain tasks outside nuclear facilities.

Standards that are required by law or contract are mandatory unless a temporary or permanent exemption from that requirement has been granted by one having proper regulatory authority. The criteria for granting an exemption to a DOE nuclear safety requirement are specified in *10 CFR 820.62, Criteria.*

5.0 Safety and Implementation Guides and Technical Standards

The Kaiser-Hill contract with DOE contains the list of DOE Directives imposed on the Kaiser-Hill Team by DOE. The Kaiser-Hill Team QA requirements are identified in the *Quality Assurance Program Criteria* document.

The foundation upon which the *Quality Assurance Program Criteria* document was developed was the *DOE Environment, Safety, and Health Configuration Guide.* The *Quality Assurance Program Criteria* document development began with a search for QA regulations, orders, and consensus standards, without regard to applicability. In all, 28 QA documents were identified and obtained. The QA documents were reviewed for possible applicability to Site activities. Several documents were set aside as not applicable.

A hierarchy of the documents was selected to place a relative level of importance on the documents in case of conflict between documents. The QA criteria of 10 CFR 830.120 were incorporated. The remaining applicable documents were reviewed and items selected that, in the opinion of the writers, best described specific features that the criteria of 10 CFR 830.120 required. In the end, several documents remained that were applicable but not used. This was because they were redundant to, or not as clear as, those items selected from other sources. They are listed in the *Quality Assurance Program Criteria* document.

The development of the *Quality Assurance Program Criteria* document involved the Rocky Flats Field Office (RFFO), EPA Region VIII QA Manager, and Site subject matter experts having QA experience in the DOE complex or the nuclear industry. Based on their comments and using an iterative process, the *Quality Assurance Program Criteria* document, was further refined. The *Quality Assurance Program Criteria* document is issued as a section of the Site QA Manual.

The requirements for the *Quality Assurance Program Criteria* document were selected from the following:

- *10 CFR 830.120, Procedural Rules for Nuclear Activities*
- *10 CFR 830.120, Quality Assurance Requirements*
- *DOE Order 5700.6C, Quality Assurance*
- *ASME-NQA-1-1994, Quality Assurance Requirements for Nuclear Facility Applications, 1994*

- *ANSI/ASQC-E4-1994, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs*
- *40 CFR 194, Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations, April 9, 1996*
- *EPA Order 5360.1 Program and Policy Requirements to Implement the Mandatory Quality Assurance Program, 1995 Draft*
- *ASTM-C-1009-89, Standard Guide for Establishing a Quality Assurance Program for Analytical Chemistry Laboratories Within the Nuclear Industry*
- *DOE/AL-QC-1,1995, Quality Criteria*
- *ANSI/NCSL Z540-1-1994, Calibration Laboratories and Measuring and Test Equipment - General Requirements*

Future changes to Site standards will be conducted through the established Order Compliance process for insertion into the Kaiser-Hill contract. Standards that are required by law or contract are mandatory unless a temporary or permanent exemption has been granted by proper regulatory authority.

6.0 Baseline Assessments

The Kaiser-Hill Team has performed QA baseline assessments for their respective areas of responsibilities to determine whether the implementing infrastructure programs and procedures incorporate the QA requirements of 10 CFR 830.120, as applicable.

6.1 Quality Assurance 10 CFR 830.120 Baseline Assessment

Quality Assurance 10 CFR 830.120 baseline assessments were performed from July 21, 1995, through January 30, 1996, by the Kaiser-Hill Team. The IMC also provided oversight and technical assistance to the Principal Subcontractors. The process was as follows:

- Sub-teams from the Kaiser-Hill Team identified specific nuclear activities and facilities that fell into each company's respective areas of responsibility.
- The sub-teams determined the programs and procedures used to control those activities.
- With guidance from the sub-team, responsible managers along with their technical personnel performed baseline assessments to determine whether the requirements of 10 CFR 830.120 were incorporated into the Site infrastructure programs and procedures. Identified issues were documented on Compliance Summary Reports.
- Representatives of organizations responsible for the Site infrastructure programs and procedures performed an additional baseline assessment. The objective of the additional assessment was to determine implementation issues associated with the infrastructure programs and procedures such that Kaiser-Hill has confidence in the functionality of the programs and procedures to support the Site mission.
- The findings have been reviewed and evaluated in accordance with the criteria contained in Appendix 1. Items that did not meet the criteria were deleted from subsequent revisions of the Implementation Plan as explained in Section 2.0.
- Remaining open issues are included in Attachment 1. These items have been entered into and are being tracked through the Commitments Management and Corrective Actions processes.

6.2 Verification of 10 CFR 830.120 Baseline Assessment

The IMC has conducted an assessment to verify that information gathered in the baseline assessment accurately reflects the status of the Site. The verification included a sample of the implementation issues identified in the Compliance Summary Reports. The verification found that the "shall" statements contained in 10 CFR 830.120 are reflected as requirements in the upper-tier governing Site documents and that those requirements flow down into the implementing procedures sampled in the verification.

7.0 Additional Activities

The additional activities that are necessary to meet the requirements of 10 CFR 830.120 are described in Attachment 1.

8.0 Graded Approach

The Site is instituting an Integrated Safety Management (ISM) process through which ongoing and future activities are evaluated for risk to establish control for the protection of the workers, public, and environment. The ISM process is developed in accordance with Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 95-2 to the Secretary of Energy which provides guidance for standards implementation. The development of safety management programs using these standards and applying the graded approach to standards implementation is intended to provide an appropriate level of protection and control for the conduct of work. The ISM process systematically integrates safety into management and work practices at all levels. ISM integrates the identification, analysis, and control of hazards and provides feedback for continuous improvement in work definition, planning, and safe performance of work.

Graded approach is the process by which the levels of analysis, documentation, and other actions necessary to implement the QA requirements are based on facility/activity specific factors.

10 CFR 830.120 is applied to the Site through the use of a graded approach. In order to ensure the most efficient use of resources, a graded approach is used to determine the rigor with which the QA requirements are applied to a specific facility or activity. This approach provides the flexibility to implement the programs in a way that best suits the facility or activity while maintaining full compliance with 10 CFR 830.120.

The facilities at Rocky Flats are identified as hazard category 2 or 3 nuclear facilities, radiological facilities, or other facilities. There are no hazard category 1 nuclear facilities at the Site. Because the SARs were written when the facilities were operational, they may reflect the need for more stringent safety requirements and operational needs. They may represent an over commitment for what is needed for an end-of-life facility that will be decontaminated and decommissioned. As new authorization basis documents are prepared they will adequately reflect the requirements appropriate for the current facility mission through ISM integration of the *Nuclear Safety Manual, Criticality Safety Manual, Activity Control Envelope Development*

procedure, 1-D55-ADM-02.37, and the *Activity Definition Process procedure, 1-R32-ADM-02.38.*

Consistent with *DOE STD-1082-94, Preparation, Review, and Approval of Implementation Plans for Nuclear Safety Requirements*, the Kaiser-Hill Team organization responsible for a nuclear safety requirement has been empowered to use its best judgment in the determination of the appropriate graded approach to be used to achieve full implementation of the requirement. This judgement is based on detailed knowledge of the specific requirements, features, resources, needs, goals, and interface with other organizations and facilities. The graded approach utilized to comply with a QA requirement was developed by application of the best judgments of a group of experts who have collectively broad knowledge of the applicable facilities and activities, of the safety management program for applicable facilities and activities, and of the collective wisdom behind the established regulatory requirements as defined in regulations and amplified by related technical standards and guides.

The documents which govern the graded approach process are the QAP, *Site Documents Requirements Manual* (SDRM) and the *Integrated Safety Management System* (ISMS) *Manual*. The QAP provides the graded approach criteria, while the SDRM describes the controls to assure the criteria are considered when developing implementing procedures. The ISMS Manual provides the integration of these procedures into the controls applied when determining the prevention or mitigation of the consequences of hazards.

Each Site-applicable procedure implementing a Site infrastructure program (QA requirements) has provided in the instructions section, as appropriate, the level of analysis, documentation, and actions necessary to comply with the QA requirements based on a graded approach.

Additionally, procedures and other documents which implement Site infrastructure programs with direct impact on work and work processes receive independent review under the existing Site infrastructure. This independent review utilizes an interdisciplinary technical evaluation process to evaluate safety issues and (implicitly) quality aspects. Further, work-level instructions, procedures, and other instruments of work control developed under the Site infrastructure programs receive independent review (primarily Operations Review Committees) as a verification of the implementation of safety and program (including quality) requirements, where the work to be performed meets threshold risk requirements. This process as a whole validates the grading and application of quality assurance requirements.

The following general criteria are guiding principles in the application of graded approach by the Kaiser-Hill Team:

- Graded approach may not be used to avoid compliance with federal, state, and local regulations.
- The higher the risk, the more rigor is required to ensure that requirements are met.
- Site facilities and activities are graded as either nuclear or non-nuclear facilities or activities.
- The program owner organization, because it has detailed knowledge of processes, items, activities, and programs, uses best judgment in determining the rigor of requirement implementation, administrative controls, and business practices to be applied to ensure requirements are met.
- Implementing procedures and work plans reflect the use of the graded approach by setting forth direction for the amount of analysis, documentation, and actions required to ensure requirements are met.

Graded approach has been implemented to meet the QA requirements considering and using individually, or in combination, the following criteria:

- The relative importance to safety, safeguards, and security - The relative importance of an activity or item to safety, security, safeguards, environment, or mission provides the basis for establishing the order of completion or the depth, rigor, and thoroughness in applying the requirement. (For example: the corrective action process provides for grading deficiencies and other action items by significance level. Corrective actions are scheduled and accomplished based, in part, on significance.)
- The magnitude of any hazard involved - Consideration of the risks and hazards of the facility allows the implementing organization to focus resources on the activities most likely to reduce the associated risks and hazards by tailoring the implementing actions to the specific risks and hazards at the individual facilities and activities. (For example: activities to stabilize plutonium were given high priority in the *Ten Year Plan*, the Site strategic plan, in order to reduce the hazardous condition.)
- The life cycle stage of a facility - The consideration of the life cycle stage of a facility permits the implementing organization to assess the appropriate application for the current life cycle stage of the facility. (For example: a facility that has the source material removed, and that is scheduled for decontamination and decommissioning, should have fewer requirements than a plutonium storage facility.)

- The programmatic mission of a facility - The programmatic mission of a facility, including passive missions such as contamination confinement and material storage, may dictate the degree of gradation for the implementation of a requirement. (For example: an operating facility that processes plutonium should have more rigorous and a larger number of requirements than a material storage facility.)
- The particular characteristics of a facility - The particular characteristics of a facility influence how nuclear safety requirements are applied. (For example: a waste storage facility should have fewer requirements than a plutonium facility performing stabilization activities.)
- Any other relevant factor - One such factor might be phased implementation of a requirement (by time or by facility). Phased implementation of a requirement minimizes the impact on resources and allows for a learning curve. (For example: the procedure preparation process is being phased in over time to minimize the impact on resources.)

Graded approach has been utilized during the development of the Site infrastructure programs and implementing procedures to comply with the requirements of 10 CFR 830.120. Graded approach is built into Site infrastructure programs and procedures including, but not limited to: Policies and Procedures, Issues Management, Operational Readiness Reviews, Lessons Learned, Configuration Management, Training and Qualification, Emergency Management, Security and Safeguards, Engineering, Maintenance, Conduct of Operations, Radiation Protection, Occurrence Reporting, Procurement, Waste Management, and Nuclear Safety. The Commitments Management and Corrective Actions processes provide a mechanism for prioritizing and evaluating unclassified deficiencies, concerns, and improvements. It is the responsibility of the Line organizations to ensure that QA requirements are applied in a manner commensurate with the work being accomplished as defined by the Site infrastructure. Line organization is defined as the organizations responsible for the execution of programs and conduct of work.

The Kaiser-Hill Team QAP, Appendix 1, Graded Approach to the Requirements of 10 CFR 830.120, describes how graded approach is applied to each of the ten criteria of the QA Rule.

9.0 Resource Assessment

Fiscal Year 1998 budget work authorization document numbers, additional funding requirements, corrective action tasks, and schedules for items identified by the baseline assessments are provided in Attachment 1. Based on identified issues, current budget, and projected availability of funds, the existing work packages and identified additional funding should be sufficient to meet the requirements of 10 CFR 830.120. Quality Assurance Program implementation resources are assessed annually during the budget cycle. FY-98 budget for completion of the five open programmatic deficiencies is $9,061,500. Funding sources are identified in Attachment 1. In addition, Kaiser-Hill Quality Program activities for FY-98 are budgeted at $1,383,684 in WBS 1.1.08.03.06.04.

10.0 Prioritization

Implementation issues identified in the QA baseline assessment have been prioritized in accordance with the Site Commitments Management and Corrective Actions processes. The level of importance to be placed on the correction of a deficiency or action request is evaluated for impact by considering the types of risks that may be encountered, consequences of these risks, and the frequency or probability of occurrence of like deficiencies or action requests. Significance levels are assigned based on the evaluation in relation to the impact on health, safety, the environment, regulatory compliance, safeguards and security, or the operation or mission at the Site. Significance levels are classified as:

- High - Significant Impact
- Low - Minor Impact

The significance levels for the implementation issues included in Attachment 1 are per *Site Corrective Action Requirements Manual, 1-MAN-012-SCARM.*

11.0 Milestones and Schedules

Milestones and schedules have been developed and will be tracked. Scheduled completion dates for identified implementation issues are shown in Attachment 1. Intermediate tasks are entered into the Plant Action Tracking System and are tracked through the Commitments Management and Corrective Actions Process. Detailed corrective action plans are available through the Kaiser-Hill Plant Action Tracking System organization.

12.0 Exemptions

No exemptions from the criteria of 10 CFR 830.120 are being requested.

13.0 Compensatory Actions

Compensatory actions for identified implementation issues are documented in Attachment 1.

14.0 Tracking

Implementation issues identified in Attachment 1 are being tracked by the Commitments Management and Corrective Actions processes. Five issues of 26 remain open. These are issues numbered 11, 13, 15, 17, and 18. Each of these issues have been updated to November 1997, to reflect changes in implementation and compensatory measures, as applicable, based on changes in Site infrastructure and agreements with DOE, RFFO. Historical data for each issue can be found in the past revisions to this implementation plan.

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Criteria for Including Issues in the Quality Assurance 10 CFR 830.120 Implementation Plan

The DOE expectation is that the Implementation Plan for 10 CFR 830.120 will identify the status of implementing the QA requirements down to the floor level.

Revision 1 of the Implementation Plan, submitted to DOE on February 2, 1996, contained implementation and compliance issues that had a price tag of well over 400 million dollars to correct. DOE provided comments and guidance both in meetings and in writing that clarified DOE expectations.[1] Based on these comments and guidance, the Kaiser-Hill Team evaluated the previously reported issues using the following criteria.

Site programs and functions such as fire protection, conduct of operations, maintenance, safeguards and security, and others are recognized to be enforceable under 10 CFR 830.120; however, detailed plans for these programs and functions will be addressed by other DOE Rules and DOE Orders. The Kaiser-Hill Team is continuing the process of identifying the subset of requirements to support Site activities. Certain deficiencies identified in Appendix 1 of Revision 1 for Site programs and functions may no longer be relevant under the new definition.

The following Implementation Issues are included in the 10 CFR 830.120 Implementation Plan:

1. QA issues that are not governed by another DOE Rule (e.g., 10 CFR 835) or DOE Directive.

2. Programmatic QA issues not addressed by Implementation Plans or Requests for Approval as discussed above.

3. Implementation deficiencies. Implementation means that where a requirement applies, a process is established (i.e. formal training, assessments, and/or inspection/acceptance testing) or a tool is available for use (i.e., procedure, design specifications, and/or procurement records) which fulfills the intent of

[1] Memorandum SIG:NAM:07019 from David A. Brockman to Tony R. Buhl, Rocky Flats Field Office Expectations for Quality Assurance Plan and Implementation Plan, dated April 11, 1996.

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the requirement and allows work to be performed in a safe and effective manner. Lack of such a process or tool is an implementation deficiency.

Lack of budget/resource issues that remain following graded approach consideration, and that are of such extent so as to jeopardize development and/or implementation of the program/process, are considered to fall under the category of Implementation Issues.

Compliance issues are not included in the Implementation Plan. "Compliance is the day-to-day utilization of these processes/tools and conformance to the intent, during the actual performance of work. It is understood that on any given day someone may not comply with a requirement, knowingly, or unknowingly, and that the actual noncompliance with a requirement may be an apparent violation and could also be deemed enforceable in accordance with 10 CFR 820."

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	[redacted]	Scheduled Completion Funding Source PATS Number Significance Level
1	(c) Quality Assurance Criteria (1) Management (i) Program	Yes	Quality Assurance Program & Implementation Plan (QAP&IP) - Site Quality Assurance Manual.	**Deficiency:** Guidance needs to be provided on how to build graded approach into Site infrastructure programs and procedures. Instructions need to be provided for documenting the bases for selection using graded approach. **Implementation Activity:** Graded Approach will be addressed as a requirement in the *Site Documentation Requirements Manual* which is being developed by the Site Streamlining Initiative Team. For Authorization Basis activities, graded approach will be further formalized through the Activity Definition procedure, application of the DOE Work Smart Standards closure process, and implementation of DOE's 95-2 Plan. The independent review process described in Section 8 of the IP, is implemented to validate the outcome of any of the above initiatives. (KH-H&S) **Compensatory Action:** The QAP&IP have been revised to describe the Kaiser-Hill Team graded approach, the general and specific criteria and guidelines upon which the graded approach is based, and how graded approach is built into the programs and procedures that implement the ten criteria of 10 CFR 830.120. The Kaiser-Hill Team will continue to implement the infrastructure programs and procedures.	Completed 3/31/97 •95-004370 •Low
2	(c) (1) Management (ii) Personnel Training & Qualification	Yes	Training	**Deficiency:** Qualification and Continuing Training program for Engineering personnel is not formalized. **Implementation Activity:** Update the *Engineering and Project Manual QA Plan* to identify 1-S50-T&Q-QC-002 as the method for compliance to qualification requirements. (KH-SETS) **Compensatory Action:** The methods used by SETS for complying with the qualification and continued training requirements are addressed in 1-S50-T&Q-QC-002 and the *Site Training User's Manual.*	Completed 8/7/96 •96-000784 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
3	(c) (1) Management (ii) Personnel Training and Qualification CONTINUED	Yes		**Deficiency:** Qualification Standard Packages need development and/or revision. The training and qualification program has not been completely implemented for SSOC activities. **Implementation Activity:** Review and revise Qualification Standard Packages. (RMRS) Develop SSOC Training Improvement Plan, and implement the necessary training for facility and support personnel. **Compensatory Action:** RMRS has conducted a company-wide assessment to determine the status of existing training and qualifications. Certain QSPs have been prioritized for review and revision, if necessary. For example, the QSP for Non-Destructive Assay Operations has been revised. Other qualifications are being prioritized for revision. (RMRS) SSOC will continue to provide training on an as-identified basis pending implementation of the SSOC Training Plan. Additional management and supervisory attention has been provided, and increased management observation of work activities is being performed. Specialized training has been developed for facility and support personnel to respond to identified needs and areas of weakness. The general experience level and skill level of facility and support personnel is adequate. (SSOC)	Completed **4/30/97** (RMRS) •96-000781 (RMRS) •High (RMRS) •Completed **9/30/97** (SSOC) •DCS171 (and various) (SSOC) •96-000789 (SSOC) •Low (SSOC)

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
4	(c) (1) Management (ii) Personnel Training and Qualification CONTINUED	Yes		**Deficiency:** Applicable Quality Assurance Program requirements are not covered in current training documentation. (NQA-1, 1994, Part 1, Supplement 2S-4, Sections 2 and 3). **Implementation Activity:** Incorporate requirements into the total rewrite of Level 1 *Training and Qualification Program Plan*. (KH-T&Q, H&S) **Compensatory Action:** Document Modification Request 96-DMR-000609 has been issued for *95-PP/T&Q-0026, Training and Qualification Program Plan*, to show the responsibilities of Line Managers and Subject Matter Experts include incorporating applicable codes, standards and procedures, applicable QAP elements, and job responsibility and authority into developed training or provided as additional training.	Completed **9/24/96** •95-004438 •Low
5	(c) (1) Management (ii) Personnel Training and Qualification CONTINUED	Yes		**Deficiency:** The Training Implementation Matrix (TIM). identifies the qualification and certification requirements for only 14-nuclear facilities, rather than the larger number (23 nuclear facilities) identified in the *Site SAR Project Phase I Summary Report No. NSTR-016-94*, Rev. 2. **Implementation Activity:** Training and Qualification Council to develop strategy and revise documentation using a graded approach. (KH-T&Q) **Compensatory Action:** Managers will ensure that their employees are sufficiently trained, skilled, and knowledgeable to accomplish a task safely and in accordance with requirements before assigning them to do the task. The affected Subcontractors have designated individuals to prepare TIM sections for all nuclear facilities under their responsible control. These individuals are currently using existing TIM sections or QSPs from other facilities with similar operations and personnel as a baseline for assisting facility managers in determining qualification requirements. Managers have detailed knowledge of the processes and activities involved.	Completed 10/31/97 •WP-81101 •95-004418 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
6	(c) (1) Management (iii) Quality Improvement	Yes	Sitewide Commitments Management and Corrective Actions Process (CM&CAP) - Management Assessment Process [See QA Criteria (3) Assessment (I) Management Assessment] - Cause Analysis Process - Lessons Learned Process	**Deficiency:** The quality improvement process has not been adequately implemented for SSOC activities. Elements including root cause analysis, trend identification and analysis, and lessons learned are not being performed in an acceptable manner, and the entire quality improvement process needs to be improved, from problem identification to commitment tracking. Portions of the above process are being implemented, but they do not always result in the development of effective corrective actions to prevent recurrence, the timely completion of needed actions, or in notification to other organizations of problems that potentially affect them. **Implementation Activity:** Fully implement the quality improvement process for SSOC activities. **Compensatory Action:** Evaluations of events are resulting in the identification of improvements which can be made to existing processes. SSOC is working with other Site contractors and using this information to make incremental improvements in the quality improvement process until full implementation is accomplished for SSOC activities. In the interim, SSOC will continue to rely on other Site contractors (e.g., DynCorp and Kaiser-Hill) for input in the areas for which they have responsibility.	Completed **10/31/97** (Letter DOE-RFFO, 00429-RF-97 approved date change from 3/31/97 to 10/31/97) •DCS1060 •96-001826 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency / Implementation Activity / Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
7	(c) (1) Management (iv) Documents and Records	Yes	Site Procedures Process - Integrated Work Control Program (IWCP) - Document Control - Records Management - Configuration Change Control Program (CCCP)/ Conduct of Engineering Manual (COEM)	**Deficiency:** The Site records management system does not provide appropriate storage of RMRS Quality Assurance Records until those records have been determined by RMRS to be inactive (i.e., no longer needed to conduct business). **Implementation Activity:** Complete selection and implementation of an appropriate records imaging system. Prepare records for imaging. (RMRS) **Compensatory Action:** Since active Quality Assurance Records may remain in RMRS' possession for years, adequate controls and procedures are being developed and endorsed by Site records management. An organization and central repository has been assigned to administer the records management program. A team has been established to identify existing RMRS quality records. Records Management is briefing other RMRS personnel on how to identify QA records and implement interim control measures. During the implementation of the imaging system and associated procedures and documentation, RMRS records are being transmitted to the RMRS Records Center for temporary storage until processing can occur.	Completed **5/28/97** •96-000778 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency / Implementation Activity (Responsible Organization) / Compensatory Action	Scheduled Completion / Funding Source / PATS Number / Significance Level
8	(c) (1) Management (iv) Documents and Records CONTINUED	Yes		**Deficiency:** The Document Control Program is not adhered to by the following organizations: Engineering, Analytical Labs, Radiological Engineering, Industrial Hygiene, Environmental Restoration Management, WSLLC. In addition, an unknown number of Site companies have instituted their own document control systems in a variety of other areas. **Implementation Activity:** Incorporate non-centralized document control systems into the Site Document Control infrastructure. A DMR will be issued by September 30, 1996, to change the *Document Control Program (1-77000-DC-001)* to include a statement that requires subcontractors to comply with the Site Document Control requirements. An orderly turnover of documents will be coordinated with Source One Management. (KH-F&A) **Compensatory Action:** The Kaiser-Hill Vice President for Finance and Administration will issue a memorandum by August 15, 1996, to all Site Management to direct all subcontractors to immediately comply with the Site Document Control System, under the purview of Source One Management, Inc.	Completed **11/22/96** •96-000385 •High
9	(c) (1) Management (iv) Documents and Records CONTINUED	Yes		**Deficiency:** Records of special nuclear material inventory are incomplete or have not been verified. **Implementation Activity:** In conjunction with a baseline physical inventory, prepare a baseline Record Review Plan. Define Source Records to be maintained for existing risk reduction activities. SSOC **Compensatory Action:** The initial sampling review of records and verification activities provides sufficient confidence that the preponderance of records are available to continue activities.	Completed **12/31/96** •96-001739 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency / Implementation Activity / Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
10	(c) (2) Performance (i) Work Processes	Yes	Price-Anderson Process - IWCP - Radiological Control Program - Nuclear Material Control & Accountability (NMC&A) - COOP - Site Procedures Process - Procurement Process - Nuclear Safety - CCCP/COEM - Emergency Preparedness - Waste Management	**Deficiency:** Lack of acceptance criteria and process controls for RMRS receipt of products and services from other contractors. **Implementation Activity:** Develop criteria for the acceptance of products and services. RMRS will develop case-specific letters of agreement with other Principal Subcontractors for acceptance of products and services until specific acceptance criteria can be developed. (RMRS) **Compensatory Action:** RMRS has trained its Quality Engineers (QEs) on the requirements of existing procurement systems. QEs are required to review all purchase requisitions for proper quality controls and adherence to existing procurement requirements. RMRS will continue to use existing procedures and documentation including the PQE processes for product and services acceptance as they relate to outside contractors. However, the PQE process is not applicable to products and services between Principal Subcontractors. Accordingly, the $60K is to establish case specific letters of agreement between same-tier subcontractors providing products and services to each other. The compensatory action currently being utilized for acceptance between same-tier subcontractors, is to notify Kaiser-Hill of deficiencies in the receipt of products and services.	Completed 4/28/97 •96-000782 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity/Responsible Organization Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
11	(c) (2) Performance (i) Work Processes CONTINUED	Yes		**Deficiency: RMRS waste and environmental operations have several nuclear activities not adequately controlled by approved procedures. 10 CFR 830.120 specifically states the need for nuclear activities to be controlled by "approved work instructions, procedures, or other appropriate means."** **Implementation Activity: RMRS will review the set of existing instructions and the activities to determine the adequacy and effectiveness of the instructions. Examples include operations orders that have not been turned into procedures, procedures from '80 under Rockwell title that refer to non-existent organizations, new activities with inadequate or no procedure, and significant activities controlled by other non-approved controls such as worker aids. After reviewing the existing controls and activities, RMRS will prioritize the needed control, using a graded approach, and begin to develop appropriate controls using an approved instruction development process.** Review existing controls and activities, and determine the number and extent of revisions, rewrites, or new instructions required. Develop adequate work controls and instruction under an approved instruction development process. **Compensatory Action: RMRS will continue to use existing work controls and instructions, where available. These work controls and instructions are determined to be appropriate by management during the course of pre-evolution activities and other work control processes. Where adequate work controls do not exist for an activity, the controls will be developed prior to initiating the process.** Note: **RMRS will perform procedure adequacy reviews for the following activities transferred from K-H: Nuclear Safety, Criticality Safety, Rad Engineering, Authorization Basis Training, and Engineering. These activities were transferred from K-H to RMRS subsequent to the completion of the baseline assessment used in the development of this QAIP. Should the adequacy reviews result in the need to perform revision to existing procedures or developing new ones, RMRS will submit an extension request to the completion of this corrective action.**	•3/31/98 • WAD #62, **($1.2M)** •96-000779 •High •During June 1996, RMRS met with a DOE, RFFO, representative to explain and provide justification for the cost associated with this implementation activity. During these meetings objective evidence was presented that depicted the need for procedural revisions, rewrites, and original document development. It was indicated in these meetings that the current cost is only an estimate based on the number of procedures requiring revision or origination. Further, it was explained that, if funding was provided, RMRS would first assess the actual number of revisions or procedures requiring development. At the close of these meetings it was understood that no further information would be required and that the justification would be forwarded to the appropriate organizations within DOE, RFFO.

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency / Implementation Activity / Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
12	(c) (2) Performance (i) Work Processes CONTINUED	Yes		**Deficiency:** Price-Anderson Implementation Process and Reporting are not adequately covered in existing procedures. **Implementation Activity:** Revise procedures to include the entire Price-Anderson process, including a reporting procedure to be developed. (KH-H&S) **Compensatory Action:** Utilize *DOE Handbook #DOE-HDBK-1089-95 (Rev. 1) (Guidance for Identifying, Reporting and Tracking Nuclear Safety Noncompliance's)* as well as a draft internal procedure and flowchart for this process.	Completed **9/30/96** •95-004412 95-004413 •High High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency or Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
13	(c) (2) Performance (i) Work Processes CONTINUED	Yes		**Deficiency:** Site procedures and other work control documents (excluding IWCP work packages) need to be reviewed and updated, revised, rewritten as a job instruction, deleted or developed, as appropriate to reflect the IMC concept, organization, and desired method of doing work. Some SSOC facility-specific and support organization procedures need to be developed/revised and implemented. **Implementation Activity:** Define the requirements for the documentation life cycle. Review and revise the Site document hierarchy, as appropriate. Develop the criteria for elimination of unnecessary or obsolete documentation. Develop a Site Documentation Requirements Manual. Develop an implementation plan for revising procedures and work control documents. (KH-H&S) Based on assigned scope of work, and applicable documentation requirements, prepare/revise facility and support organization procedures. (SSOC) **Compensatory Action:** The schedule for procedural updates will be driven by Responsible Managers on an as needed basis, but as a minimum, will meet the periodic review requirements specified in 1-A03-PPG-004, Procedure Edit, Review, and Comment (superseded by *Site Documents Requirements Manual 1-MAN-001-SDRM*, effective 1/3/97). Kaiser-Hill Team activities will be conducted in accordance with current practices until needed procedures are developed/revised. Revision 1 of the SDRM will require program owners and appropriate subcontractors to identify their respective implementing procedures, bring them into compliance with the IMC structure, and to maintain those procedures in accordance with the requirements of the SDRM.	•3/30/98 •$4.8 Million which consists of several WADs •95-004416 •96-001847 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization)	Scheduled Completion Funding Source PATS Number Significance Level
14	(c) (2) Performance (i) Work Processes CONTINUED	Yes		**Deficiency:** Building 991 procedures have not been developed and approved for operation of certain vital safety systems, including Utilities Operations Procedures. **Implementation Activity:** Material movements to/from B991 and B886 will be performed using currently approved procedures. Trained and qualified Operations Support Specialists from B707 are used in the performance of B991 material transfers. Surveillance procedures for Fire Suppression and Fire Detection Systems will be prepared. Existing Standard Operating Procedures (SOPs) will be converted to Level 4 procedures. (SSOC) **Compensatory Action:** All fissionable material is contained in sealed Department of Transportation shipping containers, and will continue to be stored in these containers. Operations personnel conduct system walkdowns to ensure the adequacy of process operations, and the operation of vital safety systems and administrative programs in preparation for performing activities.	Completed 3/31/97 •95-004414 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
15	(c) (2) Performance (i) Work Processes CONTINUED	Yes		**Deficiency: Current nuclear safety authorization basis documents need to be revised. The new Site Authorization Basis Process currently being developed and demonstrated has not been completely institutionalized in procedures. The existing authorization basis documents for Site nuclear facilities were not developed for the current facility missions. The existing authorization bases define a conservative safety envelope that is sufficient for safe execution of near-term baseline and risk-reduction activities which support the Site's cleanup mission. However, the facilities have not had the appropriate maintenance to ensure reliability or availability of the identified safety-related equipment. Because of this degradation of safety equipment which results in out-of-tolerance to OSRs, compliance some activities have been authorized using JCOs and resulting compensatory actions to ensure adequate safety margins exist for safe performance of the activity. As discussed in other sections of this Attachment, Personnel Training and Qualifications, Quality Improvement, Document and Records, Work Processes, Design, Inspection and Acceptance Testing, Management Assessment, and Independent Assessment have not been fully implemented at the Site. This makes operation of the facilities in compliance with these requirements very difficult and results in frequent and repeated noncompliances, many of which are noncompliances with 10 CFR 830.120.** **Implementation Activity: Nuclear safety Authorization Basis (AB) documents have been or are to be developed for all Site nuclear facilities for which nuclear activities are conducted or planned. These documents are developed, updated, or upgraded by using a graded approach to provide an AB document appropriate for the level of hazard in the facilities. Facilities that pose the greatest risk to workers and the general public require the highest level of analysis and documents, while facilities that pose little or no risk require a much less rigorous evaluation and controls. DOE Standards DOE-STD-3009-94, DOE-STD-3011-94, DOE-STD-1027-92, and DOE-EM-STD-5502-94 identify the level of nuclear safety AB documentation necessary, commensurate with facility hazards.** The Site Nuclear Safety Manual specifies the actions needed to provide Site-wide nuclear safety authorization basis documentation. The formal process to assess and document the nuclear and non-nuclear hazards from Site nuclear facility operations and activities will be addressed through development of nuclear safety AB documentation (continued)	•(Institutionalization) •Completed **9/30/97** •96-000788 •High •(Development of authorization basis documents) •7/30/98 •WAD 46 and Facility Specific WADs ($2,311,500) •96-000788 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency / Implementation Issue Description / Organization	Scheduled Completion Funding Source PATS Number Significance Level
15	(c) (2) Performance (i) Work Processes CONTINUED	Yes		reflecting up-to-date hazard assessments and safety analyses. Annual, or real time, review and update of the nuclear safety AB document is important to ensure that the evaluated safety basis is current and adequate. RFETS nuclear facilities are to be operated and maintained within the safety basis established by the DOE, RFFO-approved nuclear safety AB documents. Hazards used to derive the AB in a facility change as the mission of the facility changes and as the facility cycles through the phases of operation and maintenance, to decommissioning and decontamination (D&D), and eventually, to final closure. Based on planned changes in facility hazards, AB documentation development for most of the former plutonium operations facilities, given the remaining mission life is short prior to closure (two to five years), is to be addressed by a cost-effective, hazard-based graded safety basis documentation approach. Interim safety basis documentation for these facilities will be provided using a DOE Standard DOE-STD-3011-94 basis for interim operation approach and appropriate technical safety requirements. For facilities which may be a longer mission life (e.g., Building 371, nuclear waste storage facilities such as Buildings 664, 440, and 906) an assessment of the adequacy of the existing 4.3 documentation will be made and upgrades provided as necessary.. Formal approval by DOE, RFFO is required to change the classification of a Site facility or activity from nuclear to non-nuclear (i.e., classification as less-than-a-Hazard Category 3 nuclear facility). This approval process is needed as Site nuclear facilities undergo D&D activities to remove nuclear hazards. Based on removal of hazards during Site closure activities, re-classification of facilities will govern the required AB document. Each nuclear facility at RFETS either has a recent approved AB document, has a new AB document being prepared, or has an established path forward for development of necessary AB documentation. Specifically, each of the following RFETS nuclear facilities has a new and/or current DOE, RFFO approved AB document: • Buildings 371/374 (BIO) • Building 440 (BFO) • Building 664 (SAR) • Building 707 (BIO) • 750/904 Pads (SAR) • Building 771 (BFO) • Building 886 (BIO) • Building 906 (SAR) (continued)	

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
15	(c) (2) Performance (i) Work Processes CONTINUED	Yes		Each of the following RFETS nuclear facilities has a new AB document which is undergoing DOE, RFFO review and approval: • Building 569 (BIO) • Building 991 (SAR) • Buildings 444, 881, 883 (Site SAR; these facilities are being reviewed to determine if they meet the categorization criteria to be classified as nuclear facilities) Each of the following RFETS nuclear facilities has an established path forward for the completion of AB documentation which will meet the needs of the facility life and mission; • Building 559 (update of existing, approved SAR) • Building 774 (incorporation into B771 BFO) • Building 779 (preparation of Decommissioning Operations Plans and update of existing SAR) Development of required nuclear safety AB documentation for all RFETS nuclear facilities is scheduled for completion by July 30, 1998. Compensatory Action: Nuclear safety AB documentation currently exists for all RFETS nuclear facilities. The majority of this AB documentation has formal DOE approval. Notwithstanding pending, formal DOE approval of new or upgraded AB documents under development, all RFETS nuclear facilities have adequately defined nuclear safety bases. These safety bases and, as necessary, compensatory measures allow the Site to safely accomplish current, on-going activities. Interim safety basis controls and compensatory measures (e.g., via JCOs) have been put into effect, in order to ensure that nuclear safety is maintained for facilities awaiting DOE approval of new ABs. Development of AB documentation was expedited in FY97 for nuclear facilities lacking any DOE, RFFO approved AB documentation. All RFETS nuclear facilities now have some form of hazard assessment, accident analysis, and nuclear safety control set documentation. These facilities, with or without formal DOE AB approval, conduct operations within safety bases that provide for protection of the public, workers, and the environment. Formal, DOE-approval for interim and/or upgraded AB documentation is underway or planned to occur within FY98. (continued)	

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	[redacted]	Scheduled Completion Funding Source PATS Number Significance Level
15	(c) (2) Performance (i) Work Processes CONTINUED	Yes		To ensure existing safety bases are maintained, processes exist to evaluate and address the nuclear safety impact of challenges to nuclear safety AB. These challenges and the associated, parenthetical AB maintenance processes include: • Control set, e.g., OSRs or TSRs, out -of-tolerances (Justification s for Continued Operation, with appropriate compensatory measures) • Proposed changes to control sets (OSR/TSR page changes, USQDs) • Proposed modification to procedures or facility configuration (SESs/USQDs, JHAs, ACEs) • Disposition of "discovery issues" such as design deficiencies, analytical efforts, as-found AB non-compliances (USQDs). Ongoing efforts are also provided to make revisions to existing OSRs or TSRs, through page changes, to ensure these control sets properly reflect the controls and limits required by existing hazards, accident analysis, and credited safety features (i.e., accident analysis-credited safety structures, systems and components; administrative controls; and design features). (continued)	

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
16	(c) (2) Performance (ii) Design	Yes	CCCP / COEM - Software Management Program	**Deficiency:** Failures of various organizations to comply with the Site Software Management Program constitutes programmatic breakdown. Quality assurance controls for developing, obtaining, deploying, or using software contained in 1-45000-CSM-001 are not being followed; the procedure is outdated since the cancellation of DOE 1330.1C. **Implementation Activity:** Issue will be addressed by revision of 1-45000-CSM-001 to incorporate 10 CFR 830.120 requirements using a graded approach. (KH-F&A) **Compensatory Action:** Use existing procedure until revised. Software with significant safety implications (for example: WEMS and SAN) have existing user organization-specific enhanced design and configuration controls; these will be maintained until incorporated into Site process via procedure revision.	Completed **2/6/97** •96-000787 •Low

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency, Implementation Activity, Responsible Organization, Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
17	(c) (2) Performance (ii) Design CONTINUED	Yes		**Deficiency:** Criticality safety evaluations performed prior to March 1991, do not clearly document double contingency. **Implementation Activity:** Review criticality safety evaluations performed prior to March 1991 and validate double contingency. **Compensatory Action:** When new activities are scheduled and the corresponding criticality safety evaluation predates March 1991, a review for double contingency is performed and documented before the activity is carried out. Note: Formal request for date change was submitted to DOE, RFFO during August, 1997, Card to Roberson, RCG-172-97. Verbal approval for the change was received from RFFO by R. Stachowiak.	•2/27/98 •Various Building Baseline funding sources. Totals funding estimated at $350,000 •96-001822 •High
18	(c) (2) Performance (ii) Design CONTINUED	Yes		**Deficiency:** There is unmeasured fissile material in process systems managed by SSOC. The criticality safety of this hold-up has not been evaluated. **Implementation Activity:** Measure the suspected high hold-up in process systems. Based on measurement data, develop safety bases for material held-up in process systems. Ninety-six (96) suspected high holdup locations have been identified of which 53 have been measured and reported. **Compensatory Action:** When criticality safety evaluations are performed for activities which could disturb hold-up materials, conservative evaluation assumptions are used regarding the amount of material held-up in process systems, or measurements of the hold-up are performed.	•7/31/98 •($460,000) •WAD 60 (FY98)/DCS122 •96-001825 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency/ Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
19	(c) (2) Performance (ii) Design CONTINUED			**Deficiency:** The methodology for placement of criticality detectors has not been fully validated. **Implementation Activity:** Validate methodology for placement of criticality detectors. **Compensatory action:** The methodology has been reviewed by the Site criticality safety staff and by criticality safety specialists from Los Alamos National Laboratories, the Savannah River Site, and an independent contractor. Questions about the methodology were raised, but no actual deficiencies have as yet been identified. The developer of the methodology has been contracted to answer these questions. If resolution of the questions results in deficiencies, appropriate actions will be taken.	•Complete **9/30/97** •96-001821 •High
20	(c) (2) Performance (ii) Design CONTINUED	Yes		**Deficiency:** Criticality detector placement evaluations have not been updated and properly documented for Buildings 771, 776/777, 779, and 991 consistent with present requirements. **Implementation Activity:** Confirm the validity of the criticality detector placement evaluations and documentation: (1) Survey the identified buildings to determine where documentation is lacking. Initiate proper compensatory actions for any areas where coverage is not documented. (8/30/96) (2) Formally document detector coverage for the identified buildings. (6/15/97) (Letter DOE-RFFO, 00132-RF-97 approved date changed from 12/30/96 to 6/15/97). Compensatory Action: Where detector coverage is questioned, or is determined to be deficient, the appropriate restrictions will be placed on the facility, up to termination of operations and evacuation of the facility. These restrictions will remain in place until proper coverage is confirmed.	Completed 6/14/97 •96-001824 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
21	(c) (2) Performance (ii) Design CONTINUED	Yes		**Deficiency:** Design controls for nuclear-related environmental software need to be validated. [Waste and Environmental Management System (WEMS), Rocky Flats Environmental Data System (RFEDS)]. **Implementation Activity:** ***Revise 1-V51-COEM-DES-210, Design Process Requirements*** to establish verification and validation for software. (KH-SETS) **Compensatory Action:** A revision to 1-V51-COEM-DES-210 is in process to incorporate the requirements for necessary design controls to System Category 1&2 software. A memo from L. R. Bailey, 4/16/96, to Site Engineering Managers requests that changes to Category 1&2 software be as design changes until the procedure is revised.	Completed 8/12/96 •96-000785 •Low
22	(c) (2) Performance (ii) Design CONTINUED	Yes		**Deficiency:** SSOC has not identified design authority/design agent responsibilities. **Implementation Activity:** The following action will be accomplished to implement the Site Engineering and Design infrastructure program and procedures: Establish design authority and design agent responsibilities. (SSOC) **Compensatory Action:** Letter RMS-018-95 was issued giving SSOC technical support managers the authority to approve Engineering products.	•Completed 5/23/97 •Low
23	(c) (2) Performance (iii) Procurement	No	Procurement - IWCP - CCCP / COEM.		

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency (-1) Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
24	(c) (2) Performance (iv) Inspection and Acceptance Testing	Yes	Control of M&TE - IWCP - CCCP / COEM - Procurement	**Deficiency:** Reverse traceability of out of calibration M&TE inadvertently used for acceptance testing is not addressed by program procedures as required by NQA-1, Section 3.2. Not all gages needed for safety systems are identified or calibrated. Most of the required gauges are known and in the calibration system, but ongoing activities such as OSR verifications and readiness activities are resulting in the identification of additional needs. **Implementation Activity:** Procedure *1-I97-ADM-12.01, Control of Measuring and Test Equipment* will be revised to address this issue. (DCI) Complete the identification and calibration of gauges needed for safety systems. (SSOC) **Compensatory Action:** For M&TE found out of calibration, Metrology has been and is continuing to notify the M&TE users of the condition through instructions and the issuance of a Metrology Variance Report per *SOP MLA-008, Metrology Control of Measuring and Test Equipment* so that appropriate corrective action and recalibration can be accomplished and documented. (DCI) Most gauges are already in the calibration system. As additional needs are identified during readiness activities, OSR verification activities, and other reviews, gauges are entered into the calibration system. (SSOC)	Completed **9/27/96** (DCI) •95-00435 (DCI) •Low (DCI) Completed **6/30/97** (SSOC) •96-001848 (SSOC) •Low (SSOC)

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
25	(c) (2) Performance (iv) Inspection and Acceptance Testing CONTINUED	Yes		**Deficiency:** Nuclear facilities have not fully implemented the Inspection & Acceptance Testing requirements of procedure 1-62300-HSP-11.03. **Implementation Activity:** Identify and develop actions satisfying 1-62300-HSP-11.03. NOTE: A task team of SSOC, DynCorp and IMC personnel has been formed to assess the adequacy of previously proposed actions. Kaiser-Hill Independent Assessment has identified this noncompliance as a Sitewide mission-critical issue. A cost and schedule for programmatic activities and implementation is to be updated. (SSOC) **Compensatory Action:** The number of pressure vessels in service has been reduced by Lockout/Tagout (procedure 1-15320-HSP-2.08), and several important systems have been walked down (procedure 2-D80-COEM-6.3.13) to identify key valves for priority replacement as funding becomes available. Continued operation without immediate replacement of PRVs is justified based on the premise that the risk associated with continued degradation of confinement equipment and the increased uncertainty associated with material aging under curtailment of operations is high when compared to the lower risk associated with operation of systems without replacement of PRVs. A formal analysis has not been performed for the active pressure vessels in the nuclear facilities. However, management judgements leading to the prioritization of maintenance repairs support the premise.	Completed 9/30/96 •96-001145 •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
26	(c) (3) Assessment (i) Management Assessment	Yes	Commitments Management and Corrective Action Process - Management Assessment - Compliance Management	**Deficiency:** Self-evaluations and Management Assessments are not being performed consistently across the Site due to procedural inadequacy. **Implementation Activity:** Develop and implement company-specific Management Assessment procedures to implement the Site Level Management Assessment Program. [(KH-SSOC)-9/30/96, (RMRS)-9/30/97] Compensatory Action: Site managers will continue to apply established assessment approaches (e.g. procedures 1-11000-ADM-16.10, Self Evaluation Program, and 2-B52-ADM-02.01, Independent Assessment) until the company-specific management assessment procedures are developed. **Note:** The action required by Kaiser-Hill and SSOC was reported completed by 9/30/96. A subsequent assessment indicated that the management assessment was not implemented on Site. A root cause analysis was performed and Noncompliance Tracking System Report, NTS-RFO-KHLL-SITEWIDE-1997-0002, was submitted 5/23/97 to DOE. A number of corrective actions are identified on the report, completion of which is scheduled for 11/26/97 and a follow-on Site-wide assessment to be completed by 6/12/98.	•Complete 9/30/97 •WP-83402 (K-H) •93-003824 (K-H) •Low •DCS171 (SSOC) •96-001157 (SSOC) •High •96-000780 (RMRS) •High

ID No.	10 CFR 830.120 QA Criteria	Imp. Issues	Implementing Infrastructure Programs	Deficiency Implementation Activity (Responsible Organization) Compensatory Action	Scheduled Completion Funding Source PATS Number Significance Level
27	(c) (3) Assessment (ii) Independent Assessment	Yes	Independent Assessment	**Deficiency:** Although independent assessments are being performed, Sitewide programmatic compliance and audit planning methodology has not been defined or applied to ensure overall Quality Program coverage. SSOC does not have independent assessor resources. **Implementation Activity:** Revise the assessments procedure to include a Sitewide programmatic audit planning methodology to address overall quality program coverage. (KH-H&S) Staff SSOC QA organization with the appropriate skill mix (including independent assessment resources). Issue schedule and begin conducting independent assessments. (SSOC) Compensatory Action: Utilize the existing independent assessment procedure until revised and apply appropriate programmatic audit planning pending procedure revision. Current Independent Assessment activities are being performed to meet the intent of the requirement. Kaiser-Hill has developed a schedule to cover the appropriate requirements for Independent Assessment including SSOC programs. SSOC continues to provide team members to participate in selected Kaiser-Hill Independent Assessments. Note: Programmatic audit planning procedures were revised and documented in the Site Integrated Oversight Manual, 1-MAN-013-SIOM, effective October 1, 1997.	Completed **9/30/96** (K-H) •94-007511 (K-H) •High (K-H) Completed **12/31/96** (SSOC) •96-001801 (SSOC) •High (SSOC)

Response to DOE, RFFO comments on Kaiser-Hill Team 10 CFR 830.120 Quality Assurance Implementation Plan, Revision 4

#	QAIP Section	Comment	Comment Resolution
1.	1, page 6	Overall, Rev. 4 of the Implementation Plan (IP) does not accurately reflect programmatic changes (i.e., development of new processes or procedures) that are part of the QAP implementation effort. Many changes to the Site infrastructure have been made in FY 97 that are not reflected or discussed in Rev. 4 of the IP.	The following will be added to Section 2: Significant programmatic changes have taken place to enhance the Kaiser-Hill Team's capability to meet 10 CFR 830.120 requirements. The changes include establishment of the Integrated Safety Management System (ISMS), Site corrective Action Requirements Manual, Rocky Flats Environmental technology Site Functions and Responsibilities Manual (scheduled to be issued late CY 1997 or early 1998) and modification of the strategic planning process. A description of these infrastructure changes follows: • Integrated Safety Management System: The Site is instituting an Integrated Safety Management System (ISMS) through which ongoing and future activities that have the potential to cause radiological harm to the workers, public, and environment are identified and evaluated. The ISMS integrates safety and environmental management standards/requirements in the work planning and execution processes and when implemented effectively protects the workers. The public and the environment. The ISMS combines a diverse group of people and risk graded infrastructure programs to satisfy the multiple safety environmental, and health needs uniformly. The ISMS identifies the mechanisms for increasing worker involvement in the work planning, including hazard and environmental impact identification, analysis, and control; work execution; and feedback/improvement processes. The ISMS is primarily based on the philosophies, principles, and requirements of the Department of Energy (DOE) Safety Management System Policy (DOE 450.5), Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 95-2, Department of Energy Acquisition Regulation (DEAR) clause 970.5204-2, and current infrastructure programs in use at the Site. The development of worker protection programs using these standards and applying the graded approach to standards implementation is intended to provide an appropriate level of protection and control for the conduct of work. The hazards which are credible and have consequences that could cause radiological harm to the worker, the public, or the environment are identified, analyzed, and categorized, and controls for these hazards and their consequences developed. Site documents which are used to adequately define the controls include the Nuclear Safety Manual and the Criticality Safety Manual which establish a formal set of controls and requirements for a range of activities, usually a facility. The

#	QAIP Section	Comment	Comment Resolution
			ISMS Manual also references procedures which result in detail, documented hazards assessments and controls for the activity, and determine the appropriate planning process that defines the controls necessary to perform the activity safely. The ISMS relationship to the application of quality assurance for nuclear facilities and other activities at RFETS is embodied in five basis functions: 1) Define the scope of work; 2) Identify and analyze the hazards; 3) Identify and implement controls; 4) perform the work; and 5) Provide feedback. ISMS enhances the previous incorporation of quality assurance requirements into these functions due to its integration of the existing Site infrastructure. The Site infrastructure includes the documents identified in the preceding paragraph as well as others such as, the Conduct of Engineering Manual (COEM), Conduct of Operations (COOP), the Integrated Work Control Program (IWCP), the TRU Waste Management Manual 3-MN-008-WM-001, and the Low Level Waste Management Plan, 94-RWP/EWQA-0014 for radioactive waste. The ISMS Manual was effective September 30, 1997, with full implementation scheduled for September 30, 1998. An ISMS Implementation Plan has been developed to assure personnel are trained in the concepts of ISMS and understand how the ISMS applies to the processes they now use to accomplish work safely. This will provide for a consistent and logical approach for ISMS implementation. Subcontractor's QAPPs will be revised by April 30, 1997, to address the Site established ISMS. Until the ISMS is fully implemented, the same manuals and procedures that are integrated through the ISMS are used for the identification and control of activities which have the potential to cause radiological harm. When fully implemented, the ISMS will provide greater assurance and consistency in the identification, analyzing, and categorizing of hazards associated with nuclear activities. • Site Corrective Action Requirements: The Corrective Action Program at the Site included various identification and reporting processes, each developed and implemented in order to satisfy specific laws, requirements, or regulations. Although these processes contain many corrective action program elements, they

#	QAIP Section	Comment	Comment Resolution
			individually do not satisfy all the requirements of umbrella requirements and laws, such as the Rule and Order. As a result, the Site deficiency identification and reporting processes are required to follow the Site Corrective Action Requirements Manual and its implementing procedures in order to assure that deficiencies are uniformly prioritized, tracked, trended, and that the minimum corrective action elements are met. The Plant Action Tracking System (PATS) is the approved Site tracking System. • Site Documents Requirements: The Site Documents Requirements Manual (SDRM) provides the methodology and requirements for controlling and developing RFETS documents, such as policies, management directives, manuals, procedures, instructions, and job aids. The SDRM identifies the type, purpose, applicability, and signature requirements for the different Site-applicable document types. When a procedure is selected as the correct document type, then a graded approach is applied to specify the rigor and level of activity by which the applicable set of standards and requirements are met. A re-engineering effort is currently reviewing the SDRM process for further refinement. • Rocky Flats Environmental Technology Site Functions and Responsibilities: The Kaiser-Hill Team organizational structure, functional responsibilities (including integration and implementation responsibilities), lines of authority, and interfaces are identified in the Rocky Flats Environmental Technology Site Functions and Responsibilities Manual. This manual ensures that Kaiser-Hill has clearly defined the responsibilities for each contractor at RFETS and is designed so that each contractor: • Understands the major Site functions. • Understands the differences between Kaiser-Hill integration responsibilities and subcontractor work performance responsibilities. • Recognizes the Kaiser-Hill organization with integration responsibilities and overall accountability for each function.

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			• Recognizes the Kaiser-Hill organization with integration responsibilities and overall accountability for each function. • Recognizes the subcontractor, or in some cases, the Kaiser-Hill organization, with implementation responsibilities for each function. • Recognizes the organizational units with whom they interface. • Understands the responsibilities for facility maintenance and operations. • Strategic Planning: The Kaiser-Hill Team had prepared an *Accelerated Site Action Project* (ASAP) strategic plan (also titled *Choices for Rocky Flats*) to radically decrease the Site risks and increase land availability as compared to the Site's past course of action. This strategic plan provided a number of alternatives for moving forward. Now, the Kaiser-Hill Team in cooperation with DOE, RFFO has developed a Ten Year Plan (TYP) that will complete cleanup of the Site by 2010. The plan is built on the recent work done in developing the ASAP Phase I, ASAP Phase II, Workout III, and the FY 1997 budget. The TYP brings all of the above activities under a single umbrella. During FY 1998, Kaiser-Hill is combining the *Life Cycle Baseline Plan* and the TYP into the *Focus on 2006 Plan*. The Life Cycle Baseline is a Rocky Flats Closure Project plan that currently shows the Site closing in 2010. Efforts will be made to effect a closure earlier. The impact of the *Focus on 2006 Plan* on the QAP based on planning, scheduling and resource considerations will stem from two activities: 1. Since the *Focus on 2006 Plan* includes an analysis of the Life Cycle Baseline to identify potential cost savings by challenging accepted work practices, regulatory requirements and resource requirements, quality assurance related organizations will need to assure that reductions in these areas remain commensurate with the reduced risk on the Site, and 2. Quality related organizations will need to maintain cognizance of Life Cycle Baseline changes to assure adequate resource considerations due to changes in annual funding, yearly work progress, and Stakeholder influences. The above reviews are accomplished by the integration of quality requirements during

#	QAIP Section	Comment	Comment Resolution
			development of Work Authorization Documents (WADs), which address work activities over the entire project period. When completed and implemented, the Life Cycle Baseline will be a key project management tool for the Rocky Flats Closure Project. It will document the Site's approved plan for project execution through a Work Breakdown Structure (WBS), with WADs providing detailed scope statements and corresponding detailed schedules and cost estimates. The Baseline will encompass the entire scope of the project and extend until the Site Vision is achieved. The Life Cycle Baseline will undergo updates each year (e.g., to reflect actual versus planned progress and changes in DOE funding guidance for outyears). In addition, more detail will be added for current FY and FY plus one. Change control procedures are established and implemented for the Life Cycle Baseline. The Focus on 2006 Plan, is a DOE Headquarters (HQ) document to facilitate planning and managing Environmental Management (EM) programs. DOE's integrated analysis of all EM Sites' plans will facilitate an integrated approach to waste treatment, material disposition, and other complex issues whose optimal solution may not be achievable on an individual site basis. At intervals specified by HQ, the Focus on 2006 Plan will be updated. The Integrated Site Baseline is the official approved baseline for the current fiscal year. The fiscal year planning process will include updating the Life Cycle Baseline to reflect the latest funding guidance and actual work progress. This becomes the Integrated Site Baseline and will be used to manage work during the execution year. The Kaiser-Hill Team follows the defined DOE budgeting process for funding current fiscal year work and for planning work for future fiscal years.
2.	1, page 6	The K-H Team 10 CFR 830.120 Quality Assurance Implementation Plan (Revision 4) annual submission fails to meet the intent of the QA Rule 10 CFR 830.120. The Rule states: "a submittal shall identify the changes, the	A detailed listing of the changes to the QAIP are included in this matrix identifying the sections affected. Vertical lines are provided in the left margin of the QAIP text to also identify changes. In addition Appendix 2 has been added to the QAP to identify changes for that document. The following will be added to Section 1.0 Introduction; to summarize the changes to the QAIP.

#	QAIP Section	Comment	Comment Resolution
		pages affected, and the basis for concluding that the revised QAP continues to satisfy the requirements of this section". The IP submittal fails to meet the aforementioned requirements.	• A total of 21 of 26 implementation issues in Attachment 1 have been reported complete. • Added to Section 2.0, Implementation Plan Summary, a description of programmatic changes which have taken place during Fiscal Year 1997. These include the Integrated Safety Management System, Site Corrective Action Requirements Manual, Site Documents Requirements Manual, Rocky Flats Environmental Technology Site Functions, and Responsibilities Manual and the Site Strategic Planning Program. • Added to Section 4.0, Applicability of Nuclear Safety Requirements, discussion on hazards analysis and application of controls to prevent or mitigate the consequences of hazards. • Deleted from Section 5.0, Safety and Implementation Guides and Technical Standards, reference to Standards/Requirements Identification Document (S/RIDs) and added Order Compliance process to determine Site standards • Added to Section 5.0, Safety and Implementation Guides and Technical Standards, greater detail related to the Quality Assurance Program Criteria Document. • Identified in Section 8.0, Graded Approach, that the Site governing documents for controlling the application of the graded approach are the Site Documents Requirements Manual and the Integrated Safety Management System Manual. • Deleted Appendix 2, Graded Approach to the Requirements of 10 CFR 830.120. Reference is made to the Kaiser-Hill Team Quality Assurance Program (QAP) document for this information.
3.	1.2, page 7	The discussion concerning Authorization Basis (AB) does not define the K-H QAP or subcontractor QAPP interaction with AB for the nuclear facilities and activities. See Attachment 1 Item 15.	The following will be added to Section 4.0, Applicability to Nuclear Safety Requirements: Quality assurance requirements for activities which have the potential to cause radiological harm are implemented as part of the Site infrastructure. The Site infrastructure is integrated through the ISMS processes which assures that the scope of work is defined, hazards are identified and analyzed, controls are identified and implemented to prevent or mitigate the consequences of the hazards, work is performed and feedback of results of these processes are provided to management to assure continuous improvement. Site infrastructure documents include controls of address 10 CFR 830.120 requirements and include the Nuclear Safety Manual, Criticality Safety Manual, Activity Control Envelope Document procedure 1-D55-ADM-02.37, and the Activity Definition process procedure, 1-R32-ADM-02.38 in addition to the QAP, SDRM, IWCP, COOP, and COEM.

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			Hazards are identified, analyzed, and categorized and controls for these hazards and their consequences are developed based on the hazard. This is accomplished through the ISMS process. This can include the process of developing a SAR, BIO or BFO for nuclear activities, or Health and Safety Plans (HASPs), Job Hazards Analyses (JHA), As-Low-As Reasonably Achievable (ALARA) reviews, Radiological Work Permits (RWPs), Remedial Investigations/Design Plans, Activity Control Envelope (ACE), Feasibility Studies, or Proposed Action Memoranda (PAM) for non-nuclear/radiological and industrial hazards activities. Whether or not a SAR, BIO, or BFO must be developed for a given activity, set of activities, or facility can be determined by performing a hazards, analysis or DOE standards DOE-EM-STD-5502-94, DOE-STD-1027-92, and DOE-STD-3009-94, and DOE memorandum from Richard L. Black, dated June 6, 1997, addressing hazard categorization.
4.	2, page 8	The summary write-up about BFOs is incorrect. Building 886 has a BIO, and no more BFOs are planned. Updated documents such as SARs, BIOs, or D&D plans are planned for all facilities. The Site SAR (once approved) is planned to cover rad facilities, ER activities, and radiological operations.	New wording added to Section 4 as follows: Hazards are identified, analyzed, and categorized and controls for these hazards and their consequences are developed based on the hazard. This is accomplished through the ISMS process. This can include the process of developing a SAR, BIO, or BFO for nuclear activities, or Health and Safety Plans (HASPs), job Hazards Analyses (JHA), As-Low-As Reasonably Achievable (ALARA) reviews, Radiological Work Permits (RWPs), Remedial Investigations/Design Plans, Activity Control Envelope (ACE), Feasibility Studies, or Proposed Action Memoranda (PAM) for non-nuclear radiological and industrial hazard activities. Whether or not a SAR, BIO or BFO must be developed for a given activity, set of activities, or facility can be determined by performing a hazards analysis or DPE standards DOE-EM-STD-5502-94, DOE-STD-1027-92, and DOE-STD-3009-94, and DOE memorandum from Richard L. Black, dated June 6, 1997, addressing hazard categorization.
5.	2, page 8	The IP summary merely reflects the language from Rev. 3 and fails to address the QAP changes that occurred in FY 97. No "New" entries were made to Attachment 1. The IP is still based on Phase 1 baseline assessments that are two years old.	Paragraphs 2 through 5 of Section 2.0 were added or revised to read as follows: Baseline assessments have been conducted against existing Site infrastructure documents to assure that the requirements contained in 10 CFR 830.120 were incorporated. The results of this effort was documented in Compliance Summary Reports. Programmatic deficiencies were documented in Attachment 1 of this Implementation Plan including corrective actions and associated cost and

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			schedule of noncompliance areas. Independent and management assessments are performed of each of the 10 CFR 830.120 criterion to assure adequate implementation in accordance with the programs and procedures. QA Program weaknesses are identified and targeted for corrective action using the Site corrective action process which allows for proper reporting, characterization, tracking, statusing, verification and trending of each deficiency. Significant programmatic deficiencies are reported to DOE via the Noncompliance Tracking System (NTS). The Baseline assessment identified that many of these Site infrastructure documents reflect the previous contractor organization responsibilities and methods of doing business. Revisions to procedures addressing the integrating management approach will be completed in 1998. Previously identified and reported weaknesses, deficiencies, and noncompliances have been reviewed and evaluated in accordance with the criteria contained in Appendix 1. Items that did not meet the criteria contained in Appendix 1, Criteria for Including Issues in the Quality Assurance 10 CFR 830.120 Implementation Plan, were deleted from subsequent revisions of this Implementation Plan. Those items will continue to be tracked and will be addressed under different DOE Orders and Rules by Compliance Schedule Approvals, corrective action plans, implementation plans, or other resolution documentation. The remaining implementation issues together with budget work authorization documents, additional funding requirements, corrective action tasks, schedules and significance levels for items identified by the assessments are provided in Attachment 1, Implementation Issue Matrix for Quality Assurance 10 CFR 830.120 Implementation Plan. Methodology for the annual update of the QAP includes the identification of significant changes to the Site infrastructure which affects the implementation of 10 CFR 830.120. Each subcontractor and Kaiser-Hill are informed that changes have taken place and that they are to determine the impact on open issues identified in the QAIP and to existing QA Program definition to assure continued compliance.
6.	2, page 9	Implementation Plan Summary: This section states no significant new programs or activities are needed to meet	A. Section 2 has been revised to identify and describe significant new programs related to 10 CFR 830.120 implementation. See wording as identified in the Proposed Resolution Response

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		10 CFR 830.120. However, Section 1.2 on page 8 discusses how the Site has shifted to an Order compliance approach and new authorization basis documents will be developed for all facilities. No schedule for completion is mentioned.	to Item 1 above. B. The following has been added as the last paragraph of Section 5.0 Safety and Implementation Guides and Technical Standards, to address Order Compliance: Future changes to Site standards will be conducted through the established Order Compliance Process for insertion into the Kaiser-Hill Contract. Standard that are required by law or contract are mandatory unless a temporary or permanent exemption from that requirement has been granted by one having proper regulatory authority. In addition, Section 5.0 has been revised to address how the QA Criteria was established and to make the QAIP more compatible with the Quality Assurance Program Plan (QAP). The second and fourth paragraphs have been removed and the following added to Section 5.0. The foundation upon which the Quality Assurance Program Criteria document was developed with the DOE Environment, Safety, and Health Configuration Guide. The Quality assurance Program Criteria document development began with a search for QA regulations, orders, and consensus standards, without regard to applicability. In all, 28 QA documents were identified and obtained. The QA documents were reviewed for possible applicability to Site activities. Several documents were set aside as not applicable. A hierarchy of the documents was selected to place a relative level of importance on the documents in case of conflict between documents. The QA criteria of 10 CFR 830.120 were incorporated. The remaining applicable documents were reviewed and items selected that, in the opinion of the writers, best described specific features that the criteria of 10 CFR 830.120 required. In the end, several documents remained that were applicable but not used. This was because they were redundant to, or not as clear as, those items selected from other sources. They are listed in the Quality Assurance Program Criteria document. The development of the Quality Assurance Program Criteria document involved the Rocky Flats Field Office (RFFO), EPA Denver Office QA Manager, and Site subject matter experts have QA

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			experience in the DOE complex or the nuclear industry. Based on their comments and using an interative process, the Quality Assurance Program Criteria document, as well as this QAP, were further refined. The Quality Assurance Program Criteria document is issued as a section of the Site QA Manual.
7.	3, page 9	General Information: This section is very brief. It vaguely identifies facilities and activities, and does not identify missions and contractors involved in the plan. This is required by DOE Standard 1082-94, Preparation, Review, and Approval of Implementation Plans for Nuclear Safety Requirements, section 3.2 *(DOE-STD-1082-94)*	The following has been added to Section 3.0: Kaiser-Hill, as the IMC, has overall responsibility for the Site and implements the Site mission through the four Principal Subcontractors and two Architect and Engineering/Construction and Construction Management (AE/CCM) Subcontractors. Each of the Principal Subcontractors has specific areas of responsibility. DCI provides sitewide services in support of nuclear facilities such as records management, metrology, occupational medicine, transportation, emergency preparedness, limited maintenance, and receipt inspection. RMRS performs Site environmental remediation and waste management and is responsible for several specific nuclear facilities. SSOC performs operations and maintenance for the majority of the Site's nuclear facilities. WSLLC provides security services for the Site. Kaiser-Hill and the Principal Subcontractors form the Kaiser-Hill Team. The two AE/CCM subcontractors, Denver West Remediation and Construction, L.L.C. (DWRC), and Rocky Flats Engineers and Constructors (RFEC) provide a broad range of AE/CCM services as specifically described and authorized by task orders under contract to Kaiser-Hill Several Implementation Plan items impact all Site nuclear facilities; they are described programmatically in Attachment 1. Where an item is specific to a facility or group of facilities, those facilities are listed in Attachment 1; involved contractors are listed in Attachment 1 with their specific responsibilities.
8.	3, page 9	Revision 4 of the IP should be based on QA baseline assessments that truly reflect the current program status in the field (i.e., nuclear facilities, operations and activities). Too many changes have occurred since the QAP Phase 1 baseline assessments conducted by K-H Team back in November 1995. When will the IP reflect Phase 2 baseline assessments based on DNFSB 95-2 expectations?	The IP was intended to identify deficiencies (with their associated compensatory measures and ultimate correction) preventing full implementation of a 10 CFR 830.120-compliant quality assurance program as a one-time event upon contract assumption. The Phase 1 Baseline Assessment was conducted to identify programmatic deficiencies which were documented in the IP. Ongoing Phase 2 implementation assessments are being conducted; identified programmatic or significant single deficiencies are reported via the Price-Anderson Noncompliance Tracking System (NTS).

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			The following was added to Section 3.0: Phase 2 programmatic implementation assessments continued in Fiscal Year (FY) 1997. Program weaknesses were identified and targeted for corrective action using the Site corrective action process; significant programmatic deficiencies were reported to DOE via the Noncompliance Tracking System (NTS) following the guidance of DOE-HDBK-1089-95, Guidance for Identifying, Reporting, and Tracking Nuclear Safety Noncompliances.
9.	4, 3rd paragraph	The entire write up on authorization basis and the MAL should be reviewed. The current program is not accurately reflected in the QASIP.	Reference to the MAL has been deleted to remove the implication that the MAL identifies nuclear activities or activities that have the potential to cause radiological harm. Also, the reference to the integrated sitewide baseline as the repository for information contained in the MAL was deleted; the integrated sitewide baseline will not identify nuclear activities or activities that have the potential to cause radiological harm. Additional wording to Section 4 has also been added to address hazards identification, analysis and categorization as identified in the Proposed Resolution response to item 3 above.
10.	5, 2nd paragraph	Is the development of AAs for things beyond the MAL and ABs a new decision?	The indicated wording originally referred to the establishment of Site standards using the S/RID contract modification process, which would be cited in Authorization Agreements. In Section 5.0, the paragraph describing the S/RID process has been deleted and additional words added addressing the Order Compliance Process. Also, reference to the MAL and the MAL AA has been removed, although AAs, among other documents, are considered part of the authorization basis for activities, the inclusion of AAs does not contribute to the discussion.
11.	5, Page 11	Safety and Implementation Guides and technical Standards: This section states a new set of requirements will be developed by Kaiser-Hill to replace the requirements in the DOE/Kaiser-Hill contract. No schedule for completion is provided.	The following has been added to the last paragraph of Section 5.0 to address Order Compliance. Future changes to Site standards will be conducted through the established Order Compliance process for insertion into the Kaiser-Hill contract. Standards that are required by law or contract are mandatory unless a temporary or permanent exemption from that requirement has been granted by one having proper regulatory authority.

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			The paragraph in Section 5.0 addressing S/RIDs was deleted and the following added to Section 5.0: The foundation upon which the Quality Assurance Program Criteria document was developed was the DOE Environment, Safety, and Health Configuration Guide. The Quality Assurance Program Criteria document development began with a search of QA regulations, orders, and consensus standards, without regard to applicability. In all, 28 QA documents were identified and obtained. The QA documents were reviewed for possible applicability to Site activities. Several documents were set aside as not applicable. A hierarchy of the documents were selected to place a relative level of importance on the documents in case of conflict between documents. The QA criteria of 10 CFR 830.120 were incorporated. The remaining applicable documents were reviewed and items selected that, in the opinion of the writers, best described specific features that the criteria of 10 CFR 830.120 required. In the end, several documents remained that were applicable but not used. This was because they were redundant to, or not as clear as, those items selected from other sources. They are listed in the Quality Assurance Program Criteria document. The development of the Quality Assurance Program Criteria document involved the Rocky Flats Field Office (RFFO), EPA Region VIII QA Manager, and Site subject matter experts having the QA experience in the DOE complex or the nuclear industry. Based on their comments and using an interative process, the Quality Assurance Program Criteria document, as well as this QAP, were further refined. The Quality Assurance Program Criteria document is issued as a section of the Site QA Manual.
12.	8, Page 13	The "graded approach" discussion in Section 8 does not reflect the IP commitment (Implementation Activity) for Attachment 1, Item 1. It is not readily clear that Integrated Safety Management (ISM) has been fully institutionalized or implemented at the Site in order demonstrate it's function in implementing the QA Program. What is the relationship of ISM in terms of QA	The following words have been added to Section 8.0, Graded Approach: The documents which govern the graded approach process are the QAP, Site Documents Requirements Manual (SDRM) and the Integrated Safety Management System (ISMS) Manual. The QAP provides the graded approach criteria, while the SDRM describes the controls to assure the criteria is considered when developing implementing procedures. The ISMS Manual provides the integration of these procedures into the controls applied when determining the prevention or

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		applications (i.e., graded approach) for nuclear facilities and activities at RFETS?	mitigation of the consequences of hazards. IP commitment #15 in Attachment 1 has been updated to identify compensatory measures to assure proper QA program controls are applied to work activities during ISMS implementation. See Attachment 1 commitment number 15, Compensatory Action.
13.	9, Page 7	There is no indication that an overall QAP resource assessment (i.e., & roll-up) was completed for Revision 4 of the IP. Section 9.0 should reference Work Packages or WADs that contain QAP resource numbers and/or funding levels. Can DOE expect the IMC to maintain FY97 QAP funding levels and resources for the QAP in FY98? What about QAP funding for the subcontractor organizations and The QAPPs? Example: Will the K-H Quality Program retain $1,232,823 in the FY98 budget as indicated in the Life Cycle Baseline Review submittal?	The resources required for specific implementation activities of the five open commitments listed in Attachment 1 are identified with very specific references to fund sources and FY 98 budget allocations. The open commitments are numbers 11, 13, 15,, 17, and 18. Funding sources may not be specific to only the open items but may be part of a larger scoped activity identified in the WADs. Funding identification for the open commitments is $9,061,500. In addition, the Kaiser-Hill Quality Program budget for FY98 is $1,383,684 in WBS element 1.1.08.03.06.04 for QA Program activities. A critical tracking mechanism is addition to the funding is the commitment date for completion of the specific activity. Commitments are tracked via the PATS including monitor for completion on a monthly basis at a minimum. This information has been added to Section 9.
14.	Appendix 1, page 19	What was the methodology used to ensure that QAP issues discovered in the past year were included in Rev. 4 of the IP? According to Attachment 1, there were no QAP "Implementation" issues discovered in FY97?	A description of assessments of the implementation of the 10 CFR-830.120 QA Program criteria has been added to Section 2.0, see Proposed Resolutions to Items 5 and 8 above. In addition, descriptions of significant changes in Site infrastructure which impacts the implementation of 10 CFR 830.120 criteria have been added to Section 2.0 as identified in Item 1 above.
15.	Appendix 2, page 21	The "graded approach" discussion in Appendix 2 does not reflect the IP Implementation Activity (commitment) for Attachment 1, Item 1. Example: Procedures & Policies (page 24) does not reflect the "new" infrastructure program (Site Documents Requirements Manual) adopted by the IMC in FY97 and referenced in Attachment 1. Item 1. Note: Appendix 2 was deleted based on agreement with RFFO representative and reference provided to the Kaiser-Hill Team QAP for the same information. Each RFFO	The following words have been added to the QAP Appendix 1, Policies and Procedures. The documents which govern the graded approach process are the QAP, Site Documents Requirements Manual (SDRM) and the integrated Safety Management System (ISMS) Manual. The QAP provides the graded approach criteria, while the SDRM describes the controls to assure the criteria is considered when developing implementing procedures. The ISMS Manual provides the integration of these procedures into the controls applied when determining the prevention or mitigation of the consequences of hazards.

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		comment dealing with the QAIP, Appendix 2 has been addressed and Appendix 1 of the QAP revised accordingly.	
16.	Appendix 2, Page 4 of 7	Where are the policies located? (A policy manual?)	The following has been added after "25 policies" in the second paragraph of the QAP Appendix 1, Policies and Procedures: "contained in the Kaiser-Hill Policy Manual"
17.	Appendix 2, page 5 of 7	VSS is no longer used. It is SC-1, 2, 3.	The QAP Appendix 1, (6) Design has been revised as follows: The term "VSS" has been changed to "SC 1 and 2", and the term non-VSS has been changed to "SC 3 & 4."
18.	Attachment 1, pages 28-50	Attachment 1 does not accurately reflect programmatic changes (i.e., development of new processes or procedures) that are part of the QAP implementation effort. Many changes to the Site infrastructure have been made in FY97 that are not reflected in Attachment 1 of the IP. See comment #5.	Section 2.0 has been revised to identify the significant changes to the Site infrastructure which impacts 10 CFR 830.120 implementation. Attachment 1 is intended to identify deficiencies (with their associated compensatory measures and ultimate correction) preventing full implementation of a 10 CFR 830.120 compliant quality assurance Program.
19.	Attachment 1	The funding doesn't seem to be consistently identified for open corrective actions.	Funding source and budgeted amount has been identified for each Attachment 1 commitment. For each item identified; however, the information provided allows for traceability of the identified funding to the appropriate portion of the budget.
20.	Attachment 1, page 44, item 17	Revise to reflect delayed completion date and identify Compensatory Actions.	A formal request for extension to 2/27/98, was submitted to DOE, RFFO during July 1997. Verbal approval of the extension has been received. The Commitment has been revised as follows: 1) Change date indicated for Item 17 to reflect 2/27/98. 2) Deficiency: Criticality safety evaluations performed prior to March 1991, do not clearly document double contingency. Implementation Activity: Review criticality safety evaluations performed prior to March 1991, and validate double contingency. Compensatory Actions: When new activities are scheduled and the corresponding criticality safety evaluation predates March 1991, a review for double contingency is performed and documented before the activity is carried out. Also, a note has been added identify the formal request for extension and verbal approval received.

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21.	Attachment 1, page 41, item 15	Where does the Site SAR fit into this? It is unfunded next year, and there are Site issues outstanding.	The Site SAR fits under the phase of work identified as development of authorization basis documents which is scheduled for completion 7/30/98. The Site SAR has been completed and was submitted to DOE, RFFO for approval mid 1997. A note has been also added to Commitment 15 stating that the Site SAR was submitted to DOE, RFFO for approval.
22.	Attachment 1, page 41, last column	It is unclear the number of commitments and their associated milestones due to the bullets.	Current open commitments are numbers 11, 13, 15, 17, and 18. Commitment 15 has two completion dates. The commitment for "Institutionalizing" the authorization basis documents was completed 9/30/97. Completion of development of authorization basis documents remains open and is scheduled for completion 7/30/98.
23.	Attachment 1, page 45, item 19	This item is historically inaccurate. Validation of methodology for placement of criticality alarm system detectors was not completed 9/30/96. Methodology was found to be inadequate for dealing with shielding effects of stored waste drums and had to be revised.	The commitment was reported completed on time and subjected to verification. The impact of drum shielding was assessed at the (later) time of discovery and evaluated to change some applications of the methodology; the methodology itself was evaluated as continuing to be of the same level of usability. The issue regarding the stored waste drums was considered during completion of Commitment 20.
24.	Attachment 1, page 46, last 2 columns	Two different dates are used (6/14 and 6/15).. Which is correct?	The page change committed date was 6/15/97; the final evaluation's completion date was 6/14/97. 6/14/97 was therefore used as the reported completion date.